Oil, Paint and Drug Reporter

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EUROPE'S CHEMICAL PATENT JUNGLE

February 6, 1961

OPD REPORTS FROM EUROPE PAGE THREE

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Oil, Paint and Drug Reporter

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MOVES UP: Hugh W. Strickland, advanced from vice-president to senior vice-president by Texas Gulf Sulphur Company, New York. He will have charge of sulfur production and, in the Gulf region, of all other corporate activities as well.

Ribicoff, Flemming Eye to Eye on Additives

Food & Drug Administration's bill to extend the effective date of the food additives law beyond March 6 has been sent up to Capitol Hill and will probably be introduced in the house this week.

The measure will carry the endorsement of the new Secretary of Health, Education & Welfare, Abraham Ribicoff, who has written Oren Harris, chairman of the house commerce committee, asking for favorable action on the legislation.

What's more, Mr. Ribicoff says, he sees eye to eye with his predecessor, Arthur S. Flemming, on the need for the extension.

Whether the bill will get congressional approval in its present form remains to be seen. Chemical industry representatives, in a conference with FDA officials last week, expressed objections to some of its provisions.

Apparently, the chemical makers want the HEW Secretary to have more discretionary authority in the granting of extensions. As the bill now stands, he can grant an extension only if (1) an extension is already in effect or (2) the company started a bona fide action before March 6, 1960, to determine whether a substance is a food additive or to gather the necessary scientific evidence.

Though FDA was sympathetic on at least one point made by the industry representatives, it was reported to be unwilling to yield to any immediate change in the language of the bill.

Under the bill's provisions, the secretary has the authority to extend the effective

—Continued on page 42

Molasses, Si! Publicker Reported Buying in Cuba

Publicker Industries, Inc., reportedly has bought 120 million gallons of blackstrap molasses in Cuba.

Officials of the Philadelphia fermentation concern could not be reached by OPD for comment last week, but the news was rampant in the molasses trade.

Advice is that Publicker has bought 90 million gallons for fermentation at 9 cents a gallon, and 30 million gallons for stock feed at 10 cents. This means that Publicker would pay at least $11.1 million for the material.

US buyers have generously avoided Cuban blackstrap molasses this year, fearing the government might embargo imports just as sugar imports were embargoed by President Eisenhower last June.

OPD Reports from Europe

European Chemical Patents: A Jungle of Legal Complexity For World-Minded Firms

What will be the next international legal skirmish over a chemical process? What's behind the patent rush to the Soviet Union? Here, in another first-hand report-in-depth from abroad, OPD takes a long look at Europe's chemical patent jungle.

Chemical patent managers for Europe's major companies these days are speculating about the coming international battle over patents on the polyolefin synthetic rubbers—and on how many Russian patents their firms ought to be taking out. Almost every big chemical producer admits without details that it has filed for patents in Russia. Some have been granted Soviet patents. And the Moscow *Patent Journal* has a rapidly growing circulation.

The Russians, in turn, are beginning to file and win patents in Western countries. Soviet patents, though, are only an hors d'oeuvre of legal caviar for companies which have always built their businesses on international patent positions.

European Firms Internationalist-Minded

"Here in Europe," explains the top patent man of one of the biggest concerns, "the smallness of our national markets means companies are internationalist from the start in patenting, manufacturing and market planning."

Comparing his own firm with US companies he knows, this attorney adds without critical overtones: "If I knew as little about procedure in Washington as the average American chemical company patent man knows about procedure in Paris, I'd lose my job."

Certainly the differences between national patent systems make international patent law a jungle of legal complexity sufficient to tax the most "internationalized" mind. And there are special difficulties in the chemical field:

Countries which exclude "composition-of-matter" patents; countries with special regulations for drugs, or countries where information is released prematurely to the jeopardy of a world market position.

The global ruckus over patents on the new polyolefin plastics and synthetic rubbers is a good case in point.

Many European chemical patent men believe the present difficulties in the US over high-density polyethylene and polypropylene patents will soon be eclipsed by international embroilments in the polyolefin rubbers—the polybutadienes and "natural" synthetics—in all their bewildering chemical diversity.

In most European countries, the Montecatini polypropylene patent and the Ziegler polyethylene patents are considered solidly established.

Major companies (including Imperial Chemical Industries, Ltd., Royal Dutch/Shell chemical subsidiaries, Pechiney in France and Farbwerke Hoechst AG in Germany) have taken licenses under one or more of these patents on the assumption of their basic validity.

One executive who has been involved for several years in studying polyolefin

—Continued on page 9

ADVANCED: Chester E. Brown, moved up to vice-president and general manager of the tar products division of Koppers Company, Pittsburgh, Pa., succeeding Fletcher L. Byrom, who has been made president (OPD, 12/26/60).

Polyolefin Plant Set For Big Dow 'Family'

Dow Chemical Company, aiming to provide nothing less that "the most complete family of polyolefins in the plastics industry," has slated a second polyolefin plant at Plaquemine, La.

The first plant, an 85-million-pound-a-year polyethylene unit, started up three months ago. Using a Dow-developed Ziegler process, the new facility will boost this estimated capacity by an undisclosed amount and will also be capable of turning out ethylene copolymers and polypropylene.

In a related announcement, Dow says its new 30-million-pound polypropylene unit at Torrance, Calif., will come on stream by the end of this quarter. The company also has a 10-million-pound polypropylene unit under construction at Bay City, Mich. Both the Bay City and Plaquemine plants are expected to start up by the end of the second quarter.

Chemical Business Has Its Good Side; Kefauver Says So

Can the American chemical industry actually be getting a pat on the back from Sen. Estes Kefauver? None of the big men who suffered through his investigation last year will think so, but the Tennessee legislator had to admit to the senate last week that the chemical business is a "good boy" compared to others in the matter of exports and prices.

Mr. Kefauver's opinion came in support of a request for $450,000 to carry on the work of his anti-monopoly committee this year.

In a six-year period, says the senator, chemical exports have grown enormously, but prices have increased only slightly. In contrast, he adds, is the situation in other industries: Exports have fallen off sharply while prices have soared.

Keyed to Balance-of-Payments Problem

Mr. Kefauver's anti-monopoly committee is trying to prove that big manufacturers are pricing themselves out of foreign markets, and thereby contributing to the deficit in the international balance of payments.

But the senator has to admit that this does not apply to the chemical people. His charts show that in the 1953-59 period exports of chemicals and related materials rose 75.1 percent, while prices moved up only 4 percent.

The industry is not likely to get away unscathed, however, when the investigations are resumed. It may be drawn into the inquiry from another angle: why have some manufacturers decided to establish plants in foreign countries instead of increasing exports to those countries, and why have others invested heavily in the stock of foreign competitors.

Sen. Kefauver does not mention the chemical industry specifically in his report to the senate, which embodies a request for $450,000 to carry on the committee's work this year. But he does make the following comment on the export-price picture, which was of interest to chemical men:

"Another contributing cause might be the existence of international cartel agreements under which foreign producers have agreed to stay out of the American market in exchange for agreements on the part of US producers to stay out of certain international markets. Such agreements are not unknown in the history of American industry."

In programming the committee's investigation into the area of exports in relation to prices, Mr. Kefauver ties it in with the depressed gold situation in this country.

He adds that the real significance of the drain on our gold supply is that it is

—Continued on page 58

Dominion Tar to Construct A Phthalic Anhydride Unit

Dominion Tar & Chemical Company, Ltd., Montreal, has slated construction of a new phthalic anhydride plant adjacent to its present facility at Toronto. The unit is expected to be completed by the end of this year at a cost of about $3.5 million.

The plant is designed to use naphthalene as a raw material, most of which will be provided by the company's own tar distillation plants. The oxidation units will be of the fluid bed catalyst design.

Completion of the new plant will reportedly bring Dominion Tar's phthalic anhydride capacity up to 35 million pounds a year.

Cyanamid Knows How To Curb Plant Growth

Not all plant growth chemicals are of the Jack and the Beanstalk variety. At least, no longer.

American Cyanamid Company has just developed an experimental plant-dwarfing compound which reduces the height of poinsettias to that preferred by non-climbing Jacks.

Tests have shown that poinsettias treated with "CCC," the new compound, grow 60 percent shorter than normal size, Cyanamid says.

Quinine: Who's Ready to Take Some Big Doses?

Tentative plans have been drawn up by General Services Administration to make another try next month at unloading the government's unwanted stocks of quinine.

This will mark the third attempt in as many years to dispose of the drug after the two prior efforts ran into snags when domestic interests objected to being frozen out of the proposed sale and when prices offered by both foreign and domestic buyers were too low for GSA to accept.

The quinine is largely an accumulation dating back to World War II days when the drug was gathered in by the government from corner drugstores and all other available sources to meet the malaria threat to military operations in the Pacific.

Development of the synthetic substitute, atabrin, before the end of the war, wiped out a need for the quinine in further military uses.

About three years ago, the Department of Defense put the stamp of "obsolete for military needs" on the entire 13.8 million ounces in the stockpile and GSA has been trying to get rid of the material ever since.

GSA plans to send out invitations some time next week to probably interested buyers to make an offer for the quinine. The bids are to be returned and will be opened March 15.

Only part of the entire quantity will be sold at the first offer. This is the amount that is in pharmaceutical form, totaling some 2,759,839 ounces. A few days later an additional 1,576,510 ounces in the form of hydrochloride powder will be offered to the trade.

The remaining stocks of the quinine, amounting to about 9,524,000 ounces, is in the form of sulfate powder. Sales of this material will not start until four to six

—Continued on page 58

FDA Eases Additives Policy And Speculation Starts to Grow

A Food & Drug Administration policy requiring full disclosure of the ingredients in processed foods, either by common or chemical names of the additives, is now being eased up. FDA, in an effort to settle an extended dispute with the Department of Agriculture over standards of identify for shortenings, has just agreed to permit foods containing food fats in which chemical preservatives are used to carry a simple statement to that effect.

And now the speculation has started to grow. Whether this new policy will be extended to other classes of food additives remains to be seen.

A 'Diversion'—Not an Extension

Officials of the agency readily admit that the action in the present instance marks a diversion from its policy on food labeling, but refuse to concede that it may be extended to other additives or classes of foods at a later date.

Since the passage of the food additives law, with its requirement for labeling of foods containing chemical additives, producers of chemicals have often questioned the advisability of requiring the additives to be listed chemically or by common names on the labels.

The point made is that such listings mean nothing to most consumers and more often than not might prove frightening. FDA has insisted, however, that the public is entitled to know the contents of its foods and a simple statement such as "preservatives added" does not satisfy the law.

This policy was cracked last week, however, when FDA announced its proposal to establish a standard of identity for a group of chemical presentatives used in food fats and fatty foods.

Included in the group are butylated hydroxytoluene, butylated hydroxyanisole, gum guaiac, nordihydroguaiaretic acid, propyl gallate, tocopherol, isopropyl citrate, stearyl citrate, citric acid, monoisopropyl citrate, ethylenediamine tetraacetic acid or its calcium and/or sodium salts, glycerol mono-oleate monocitrate, phosphoric acid, and certain combinations of these chemicals.

These products are used as preserva-

—*Continued on page 42*

Is Fertilizer Blending Ripe for Automation?

Put the fertilizer blending process in the hands of a digital computer, and physical facilities can be substantially reduced, labor costs sharply cut down and product quality improved.

That's the opinion of G. E. Adams, of General Electric Company, who reported his views to the American Institute of Electrical Engineers last week.

Automation of fertilizer blending has just been made possible by development of digital control computers and new types of sensors, such as x-ray analyzers, according to Mr. Adams.

Styrene, Butadiene: They'll Be Closer Now

El Paso Natural Gas Products Company, which has bought up all the outstanding minority interest of Odessa Styrene Company and all but 5 percent of Odessa Butadiene Company, is now merging the two companies to effect operation and expansion economies.

Paul Kayser, chairman of the board of the parent firm, El Paso Natural Gas, speaking before the New York Security Analysts last week, also disclosed that the products company through its partner-in-plastics, Rexall Drug & Chemical Company, is entering the consumer market.

Via its agreement with Rexall, Mr. Kayser stated, El Paso acquired one-half interest in certain processing plants to make finished plastic products, the joint project, he added also provides for the

—*Continued on page 33*

American Potash Erecting $5 Million Manganese Plant

American Potash & Chemical Corporation, Los Angeles, has begun work on a new $5 million manganese metal plant at Aberdeen, Miss. The plant site lies adjacent to the company's sodium chlorate plant. Contractor is Stearns-Roger Manufacturing Company, of Denver, Colo.

The new facility, slated for completion in December, will be American Potash's first commercial manganese metal operation, although the company has been producing the material on a pilot-plant scale.

Missile Coatings Maker To Acquire Paint Firm

Dyna-Therm Chemical Corporation, Culver City, Calif., has made arrangements to acquire the assets and business of Mathews Paint Company, Los Angeles, a privately-held concern. The transaction calls for issuance of 90,000 shares of Dyna-Therm stock.

Founded in 1887, Mathews Paint turns out a line of consumer, contractor and industrial paints, including flame-retardant and insulating coatings. The company has reported sales of $1.7 million for the fiscal year ended November 30, 1960.

Dyna-Therm produces high-temperature coatings for the missile industry, plastics and specialty building materials. It also markets a line of plastic paints under the trade name "Vee-Nol." Sales for the year ended September 30, 1960, were reported at $1.4 million.

The Week's Price Changes

Citral Oil, Coaltar Dyes, Corn Oil, Tung Oil Advanced. Almond Oil, Blue 2B Dye, Cottonseed Meal, Tin Reduced.

Prices Advanced

Blue black dye, extra conc., C.I. 20470, 7c. per lb. (p. 40).
Blue GXX dye, C.I. 52015, 21c. per lb. (p. 40).
Brown dye, MCW, C.I. 22311, 12c. per lb. (p. 40).
Citral oil, 70c. per lb. (p. 48).
Corn oil, crude, ¼c. per lb. (p. 51).
Refd., ¼c. per lb. (p. 51).
Cottonseed oil, crude, ¼c. per lb. (p. 51).
Refd., ¼c. per lb. (p. 51).
Fast blue dye SR, C.I. 13390, 14c. per lb. (p. 40).
Fast red dye, conc., C.I. 15620, 16c. per lb. (p. 40).
Hydroxycitronellal, 85c. per lb. (p. 48).
Jade green dye, NC, supra double paste. C.I. 59825, 25c. per lb. (p. 40).
Lard, cash, ¼c. per lb. (p. 51).
Lemongrass oil, 35c. per lb. (p. 48).
Linseed oil, ½c. per lb. (p. 51).
Phloxine dye, 2G, C.I. 18050, 11c. per lb. (p. 40).
Rubine dye XX, conc., C.I. 14720, 16c. per lb. (p. 40)
Tallow, edible, ½c. per lb. (p. 51).
Tung oil, 3c. per lb. (p. 51).
Soybean oil, crude, ½c. per lb. (p. 51).
Refd., ¼c. per lb. (p. 51).
Yellow dye, brown K, extra, C.I. 30045, 13c. per lb. (p. 40).

Prices Reduced

Almond oil, 10c. per lb. (p. 48).
Blue 2B dye, extra conc., C.I. 22610, 2c. per lb. (p. 40).
Cocoa butter, 1c. per lb. (p. 51).
Cottonseed meal, 50c. per lb. (p. 51).
Grapefruit oil, 15c. per lb. (p. 48).
Peanut oil, crude, ¼c. per lb. (p. 51).
Refd., ¼c. per lb. (p. 51).
Spearmint oil, 25c. per lb. (p. 48).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Feb. 3, 1961	Jan. 27, 1961	Feb. 5, 1960
110.66	110.65	111.56

Research: The Dollar Still Talks

Chemical research budgets have gone up and up, but the practical results, as measured by profitable new products, have not shown in all areas an equal growth. The improvement of research productivity, says Dr. Carl F. Prutton, has become a problem of major importance. For chemical makers whose research pay-off has been lagging, Dr. Prutton, this year's Perkin Medalist, has put forth some pertinent suggestions based on a theme of closer coordination between management and research personnel.

Specifically, top management's role in research should be given greater stress, he thinks, and one way to do this would be to move greater numbers of research men with management qualifications into managerial positions.

The Labs for Young Executives

In a speech prepared for last Friday's (February 3) Perkin Medal dinner of the Society of Chemical Industry in New York, Dr. Prutton also suggests the converse approach: Initial training programs for young executives should include a prescribed period in the research laboratory.

Dr. Prutton, retired executive vice-president of Food Machinery & Chemical Corporation's chemical divisions, finds himself on the side of financial analysts and others who favor vigorous and expanding research.

But to justify increased expenditures, his speech goes on, industry leaders should "greatly improve their performance in

—*Continued on page 58*

IN SALES POST: Robert McC. Maxwell, named manager of manganese metal sales for American Potash & Chemical Corporation, Los Angeles. He will headquarter in the firm's eastern general sales offices in New York.

Aromatics Project Slated By Mobil Branch in Italy

Socony Mobil Oil Company has set up an Italian affiliate to produce 130,000 metric tons per year of aromatics.

Located in Naples, Italy, the new company, Mobil Chimica Italiana SpA, will produce the equivalent of 39 million US gallons of benzene, ethylbenzene, orthoxylene and paraxylene.

More than 75 percent of the total will be benzene and orthoxylene. Raw material will come in large part from the adjacent refinery operated by Mobil Oil Italiana.

Phenols Go Commercial

Monsanto Chemical Company is now supplying commercial quantities of nonyl phenol and dodecyl phenol from its Kearny, N. J., plant. The products, manufactured in recently-completed alkyl phenol facilities at Kearny, are used as intermediates in the manufacture of nonionic surfactants and are used to some extent in rubber chemicals and motor oil additives.

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OIL, PAINT AND DRUG REPORTER, Vol. 179, No. 6, February 6, 1961. Published weekly on Monday by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. Copyright, 1961, Schnell Publishing Company, Inc.

NEW V.P.'s FOR ALLIED UNITS: Raymond C. Baxter (left) appointed vice-president in charge of engineering for the National Aniline Division of Allied Chemical Corporation, New York, and Dr. Robert H. Reed (right) chosen development vice-president for the corporation's Solvay Process Division. Mr. Baxter will be located in New York City and Dr. Reed in Syracuse, N.Y. Mr. Baxter has been with Allied since 1946 and Dr. Reed has been a Solvay man since 1949.

DuPont Is All Braced to Hear It: Sell or Transfer Voting Rights in GM

By this time next month, E. I. duPont de Nemours & Co., Wilmington, Del., may know whether it must unload its stockholdings in General Motors Corporation to comply with the edict of the government that these holdings violate the Clayton act, or whether it may simply transfer the voting rights in the stock to its own shareholders. With the filing of briefs last week, the stage was set for showdown arguments before the Supreme Court of the United States in final settlement of the long-standing dispute between the government and the chemical company over the penalty to be applied for the antitrust law violation.

HEADS NEW DIVISION: John J. O'Connor, named senior vice-president to head the new international division of Borden Chemical Company, New York. He had been vice-president of what was formerly the international department.

The Day—Maybe February 20

These will come when the court returns from its current recess on February 20. The duPont case has been scheduled for argument late that day or the next. A decision by the nine justices could follow within a week if the issues do not divide the court too narrowly.

Briefs have been filed with the court by the Department of Justice, duPont, General Motors, the two duPont family corporations—Christiana Securities Compand and Delaware Realty & Investment Company—and by two appointed representatives of the interests of the duPont stockholders and the GM stockholders.

The brief of the latter has been submitted as *amicus curiae*—"friend of the court."

The case comes before the high court on appeal by the government from the

—Continued on page 30

Mich. Chemical Enters Rare Earth Agreement

Michigan Chemical Corporation and Dresser Products, Inc., have a joint plan under way to supply rare earth materials in final fabricated forms to the nuclear, metallurgical and electronics industries.

A major producer of rare earth metals and oxides, Michigan Chemical will supply the high-purity materials. Dresser, a metal and cermet fabricator, will perform all fabrication work.

Sales will be handled through both companies.

Under the agreement, Michigan Chemi-

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'GRAS' List of Additives Increased by Another 84

Another batch of food additives "generally recognized as safe" have been cleared for use under the food additives law by Food & Drug Administration. The list includes eighty-four substances and brings to 467 the total number that have been granted an exemption under the law.

The list includes those items proposed in the *Federal Register* of February 2, 1960, and of August 4, 1960, with two exceptions: torula yeast and chlorophyll.

Torula yeast, dried, was removed from the group proposed for "GRAS" treatment by the February 2 list because the processing and use of this substance may result in products containing amounts of folic acid not generally recognized as safe.

FDA explains that folic acid above certain levels has been shown to have the capacity to mask the symptoms of per-

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Chemical Men Getting More Time For Labeling Law Compliance, With Another Extension Possible

Chemical producers are being given a six-month breather to get their labels in order in compliance with the requirements of the new federal hazardous substances labeling law. Food & Drug Administration has put off the effective date of the law until August 1 for other than products which are highly toxic, flammable and extremely flammable. The law went into effect on schedule for these products on February 1.

The six-months extension is in accordance with the authority contained in the law and is aimed at giving both industry and the FDA more time to prepare for the big task ahead. If the pinch is too great next August 1, another extension until August 1, 1962 is permissible.

Several Definitions

The law contains definitions for highly toxic, flammable and extremely flammable substances. Definitions for extremely flammable and flammable are based on a physical test involving the flashpoint of the substance. The definition for highly toxic substances is based on animal tests.

Commissioner of Food & Drugs George P. Larrick says:

"Ample time has elapsed since enactment of the statute for manufacturers, packers, distributors and sellers of products suitable for household use to determine which of their products fall within these three definitions. Therefore, no extension is deemed necessary for their products.

"More precise definitions for substances that are toxic (but not highly toxic), corrosive, irritant, strong sensitizers, substances capable of generating pressure through heat, decomposition or other means; and substances that are flammable or extremely flammable solids; or are extremely flammable or flammable substances in self-pressurized containers as contemplated in this act will be given in regulations to be published in the *Federal Register*.

"Thus, compliance with the provisions of the act by February 1, 1961, is not practical for those hazardous substances lacking precise definitions."

He explains that a substance may be found to be highly toxic because of human experience even though it will not meet the animal test definition.

Substances that have shown themselves to be highly toxic and hazardous by human

—Continued on page 43

Greece, Viet Nam Seeking Large Amounts of Fertilizer

Greece and Viet Nam each entered the world markets last week seeking to purchase large quantities of chemical fertilizers, at the same time that bids were being opened (February 2) by the Korean government for part of its fertilizer needs for the year.

According to the Department of Commerce, Greece is inviting offers to supply some 66,630 tons of material consisting of 25,850 tons of ammonium sulfate, 21,780 tons of ammonium nitrate, 10,000 tons of ammonium phosphate and 9,000 tons of potassium sulfate. The bids will be opened February 10.

On the same date, Viet Nam will open bids for the purchase of 35,600 metric tons of materials consisting of 12,000 tons of ammonium sulfate, 2,000 tons of urea, 200 tons of diammonium phosphate, 800 tons of muriate of potash, 600 tons of potassium sulfate and 20,000 tons of tricalcium phosphate.

The Korean bid opening was for the purchase of about 66,900 tons of various nitrogen materials, potassium sulfate and mixed fertilizers. Details were not immediately available.

Dr. George K. Nelson

ADM Chemical Units Put Into Single Group

Archer-Daniels-Midland Company has reorganized its three chemical divisions into a single chemical group. Under the new set-up, five separate departments have been established within the group to replace the former divisions—industrial chemicals, resins and plastics.

Dr. George K. Nelson (pictured above), formerly manager of the industrial chemicals division, has been named marketing manager for the entire group. J. C. Burkholder, formerly resins division manager, has become group production manager.

The product departments and their managers, who will report to Dr. Nelson are.

Resins, W. C. Mueller, formerly sales manager of the resin division; plastics, H. B. Finch, formerly manager of the plastics division; industrial chemicals, J. H. Kane, formerly sales manager of the industrial chemicals division; plasticizers, W. A. Jarvey, and nitrogen chemicals, H. G. Freese.

The chemical group's field sales admin-

—Continued on page 43

Davison Chemical Boosts Phosphate Rock Capacity

W. R. Grace & Co.'s Davison Chemical Division has completed a modernization and expansion of phosphate rock mining facilities at its Bonny Lake Mine, Ridgewood, Fla. This project follows the closing of Davison's Lakeland, Fla., mine after nearly forty years of operation.

Two draglines, flotation and other beneficiation equipment at "Pauway No. 4," the closed mine, have been transferred to Bonny Lake.

In addition, new equipment installed at Bonny Lake has increased the mine's capacity by "a significant amount," Davison says.

Monsanto Is Expanding Texas Polyethylene Unit

Monsanto Chemical Company is under way on a 30 percent capacity increase at its Texas City, Tex., high-pressure polyethylene plant.

The company's plastics division has scheduled completion of the boost for early 1962. Current capacity is estimated at 100 million pounds a year.

The new facilities will be geared to meet the process and performance requirements of specific markets, a company official says.

Phosphatic Fertilizers: These Are the Big Years

These are the big years for phosphate fertilizers. Greater advances have taken place recently—both in technology and production—than in all the industry's earlier history. And new advances appear in the offing.

So states Dr. L. B. Nelson, manager of the office of agricultural and chemical development of the Tennessee Valley Authority. And, in doing so. Dr. Nelson has just made a number of long-range predictions on the future of the fertilizers.

Speaking before the Soil Science Society of North Carolina in Raleigh last week, he pointed out that the country is now producing about 16 million long tons of phosphate rock a year, of which approximately 60 percent is used in fertilizer.

"Phosphate consumption undoubtedly will continue to increase in response to the needs for more efficient farming and to the demands for more food and fiber as our population grows," Dr. Nelson told the group. "The trend toward higher analysis of mixed fertilizers will continue, which means that normal superphosphates will be superseded by concentrated superphosphates, ammonium phosphates, phosphoric acid, and other high analysis phosphate compounds.

"There is every indication that greater use will be made of liquid mixed fertilizers," he went on.

"Inefficiencies in the recovery of phosphate rock in mining operations gradually will be overcome. Presently about a third of the mined rock is lost in washings and tailings. Higher recoveries would conserve phosphate deposits and might lower production costs.

"There will be a continuing shift to dependence on the huge western phosphate

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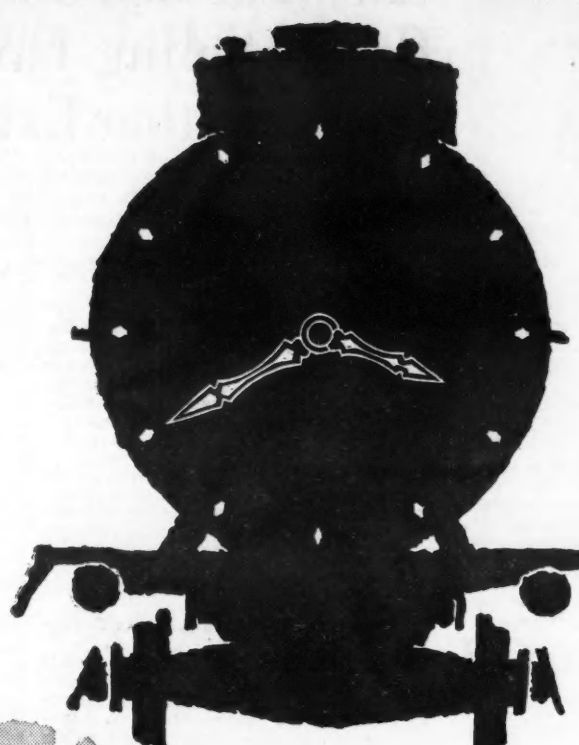

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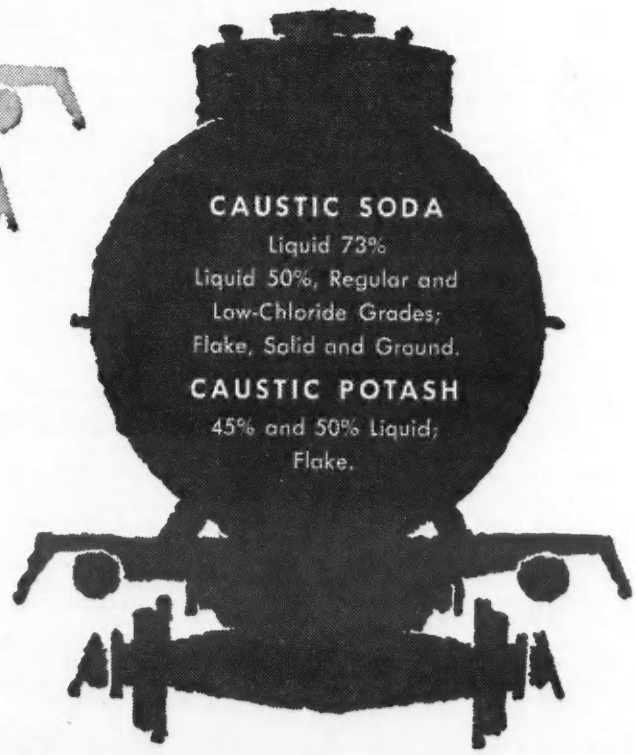

Putting Ideas to Work

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General Sales Offices:

161 E. 42nd STREET, NEW YORK 17

NAMED COMPANY OFFICIAL: William R. Rinelli, made a vice-president of Ansul Chemical Company, Marinette, Wis. He is general manager of the chemical products division.

Nat'l Distillers Cozier With Brass Company

National Distillers & Chemical Corporation, and its friend, Bridgeport Brass Company—who came to know each other through their mutual interest in exotic metals—seem destined to carry their acquaintance all the way via the merger route.

Directors of both concerns have just approved recently-admitted merger plans (OPD, 1/30/61) and announced that details are being worked out for the necessary okays from the stockholders, which are hoped for at the annual meetings in May.

With their joint interests based on such products as zirconium, titanium and hafnium, the companies say they see advantage in a proposal that would find Bridgeport Brass merging into National Distillers—and thus bringing together organizations with combined annual sales of about $730 million and assets of approximately $625 million.

National Distillers, a New York-based leader in the liquor and chemical business, and Bridgeport Brass, long regarded as a giant in metals, got acquainted when they started working together at Reactive Metals, Inc., one of the country's largest

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Camphor Tablet Output Is Resumed by Clintbrook

Although seriously handicapped by a fire at its Lyndhurst, N. J., plant, Clintbrook Chemical Company, a division of Chas. L. Huisking & Co., says it is resuming shipments of one-ounce camphor tablets.

Loss of some wrapping and packaging equipment, however, has made it necessary for the company to turn out the tablets in round form rather than square.

Within three weeks the company expects to be restored to normal with the tablets available in standard sizes, form and wrapping.

Price and Value Are Different And Thereby Hangs a Bargain, A Buyer Informs Some Buyers

Price is one thing, but value is another. And that is what the purchaser of chemicals must know if he is to do his job successfully and get the best buys for his company. So the Chemical Buyers Group of the National Association of Purchasing Agents was advised last week at the mid-winter meeting in New York. Telling him was a top buyer himself: J. W. McNeil, manager of the chemical procurement department of Pittsburgh Chemical Company, Pittsburgh, Pa., a subsidiary of Pittsburgh Coke & Chemical Company.

Not to belittle price, however, Mr. McNeil told the chemical purchasers this:

"Price is an important and persuasive factor in any sales-purchase transaction. However, its effect on the final buying decision is over-rated."

When Price Is Important

Then, to explain himself, Mr. McNeil went on to say that price "becomes the foremost buying influence only when the purchasing policy is based on expediency, speculation and short-range planning.

"The competitive nature of our free enterprise demands that progressive and successful industrial firms spend their dollars so as to reflect the highest possible value return rather than the lowest available price."

Mr. McNeil also had some added advice for the chemical salesmen. It went this way:

"It would seem helpful if a salesman would periodically make his own value analysis as it pertains to each product and buyer he is selling or desires to sell. Results could be relayed to the buyer. Such action would be aggressive and motivate or stimulate most buyers.

"In short, a seller who has values to offer needs to stress value. This action, of course, in no way relieves the buyer of his basic responsibility to seek out aggressively and develop the highest values for his company."

In another speech, Dr. F. C. Jelen, of the Solvay Process Division of Allied

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Monsanto Chemical Offers New Blendable Polyethylene

Monsanto Chemical Company has introduced a 45 percent concentrate white polyethylene which reportedly can be blended with any of the company's polyethylene extrusion and film resins to suit specific end-use requirements.

Designated polyethylene "6407," the new concentrate is compounded with the company's polyethylene "70" and a rutile titanium dioxide pigment which is said to reduce materially screenpack and nonuniform pigment feed.

A spokesman for the company's Springfield, Mass., plastics division says that the new material gives extruders and extrusion coaters maximum inventory control and flexibility and at the same time permits substantial production savings and quality improvements.

For any concentration below 45 percent, the new concentrate can be blended in standard dry tumbling equipment or preblenders with the right amounts of any other Monsanto polyethylene resin, the spokesman adds.

Charles E. Griffith

SACCI Stirs Its Own Presidential Doings

Not all the presidential excitement is confined to Washington these days. At least, so it would seem from the goings-on at the higher echelon of the Salesmen's Association of the American Chemical Industry.

SACCI, which installed Preston F. Tinsley as its new president only a fortnight ago (OPD, 1/30/61), had to go through the motions again last week—and this time with an entirely new man.

SACCI's new chief executive is Charles E. Griffith of R. W. Greeff & Co., who only eleven days ago was inducted as vice-president of the association.

This bit of electoral substitution—effected by SACCI's board of directors in accordance with the organization's constitution—was prompted by the stunning

—Continued on page 30

McCormick Center of Stage At Flavor Chemists' Meeting

It was "McCormick night" at the dinner meeting held last week by the Flavor Chemists Association in New York.

Dr. Richard L. Hall, research director of McCormick & Co., Baltimore, Md., was made an honorary member of the association. Featured speaker was Dr. William H. Stahl, research manager of McCormick, who discussed the chemistry of tea.

Nepheline Syenite: Imports Harmless, Says Washington

Domestic feldspar producers have failed to convince the Tariff Commission that they have suffered damage or injury from imported nepheline syenite. Under Tariff's scrutiny, at the urging of US producers, were certain pricing practices followed by Canadian exporters of the product.

While these practices may have resulted in sales at less than fair value in the US, there is no evidence of injury to the American competitors, nor is there any likelihood that questionable pricing will be resumed, the commission said last week.

Rate of Exchange Ignored

The Canadian producers of nepheline syenite, which competes with US feldspar in the manufacture of glass, were confronted with charges of anti-dumping act violations for the policy of selling nepheline syenite to US buyers without regard to differences in the rate of exchange between US dollars and Canadian dollars, and for a practice of absorbing part of the freight costs.

The practice of quoting the price of nepheline syenite in Canadian dollars to Canadian purchasers and the same number of US dollars to US buyers meant that costs to US buyers were less than to Canadian buyers when the Canadian dollar moved into a premium position a year ago.

The two Canadian companies involved immediately discontinued this selling policy, the Tariff Commission said, as soon as they were apprised of the significance of the practice in November, 1959.

The freight absorption aspect of the case emerged when domestic feldspar producers gained a more favorable competitive position as a result of certain freight reductions that were made applicable to feldspar in the US.

Following these freight rate changes, the Canadian exporters began to absorb a sufficient part of the freight charges to equal the most recent freight advantages obtained by the domestic feldspar producers.

This caused the price of the Canadian product to US buyers to be lower than the price to Canadian producers.

E. F. Drew Organizes Food Emulsifier Unit

E. F. Drew & Co., Palmo, N. Y., has organized a new food emulsifier division. The unit has been operative for six months, but announcement of it was withheld until strict quality control standards could be established and maintained.

The company's new line of products includes: both vegetable and animal hard and soft 40-45 percent monos, high hard vegetable monos, acetylated tartrated monos, lactated palmitates and stearates, propylene glycol mono searates plus reportedly unique peanut, coconut and oleate monoglycerides.

The materials are being made available in a number of different physical forms and containers.

Association Meetings

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Maim, Germany, June 9-17.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Coke & Coal Chemicals Institute, western regional meeting, Drake hotel, Chicago, February 9.

American Institute of Chemical Engineeds, annual meeting and petrochemical exposition, Municipal Auditorium, New Orleans, La., February 25-March 1.

American Paper & Pulp Association, annual meeting, Waldorf-Astoria hotel, New York, February 19-23.

American Pharmaceutical Association, annual convention, Sherman hotel, Chicago, April 23-28.

American Society of Perfumers, annual symposium, Essex House, New York, April 13.

Animal Health Institute, annual meeting, Mayflower hotel, Washington, April 24-26.

Chemical Market Research Association, Shoreham hotel, Washington, D. C., February 15-17.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 15-17.

Chemurgic Council, annual conference, Sheraton-Gibson hotel, Cincinnati, Ohio, April 12-14.

Commercial Chemical Development Association, annual meeting, Roosevelt hotel, New York, March 15-16; annual outing, Bedford Springs hotel, Bedford Springs, Pa., May 24-25.

Drug, Chemical & Allied Trades Association, annual banquet, Waldorf-Astoria hotel, New York, March 2.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Federal Wholesale Druggists' Association, mid-year meeting, Statler-Hilton hotel, New York, March 2-3.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

International Congress on Pure & Applied Chemistry, Montreal, Canada, August 6-12.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 8-10.

National Agricultural Chemicals Association, annual meeting, Homestead, Hot Springs, Va., October 29-November 1.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

Pharmaceutical Manufacturers Association, central regional meeting, Edgewater Beach hotel, Chicago, February 13-15; western regional meeting, Ambassador hotel, Los Angeles, February 20-21; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 14-17.

Society of the Plastics Industry, reinforced plastics conference, Edgewater Beach hotel, Chicaga February 7-9.

Society of the Plastics Industry, western section conference, del Coronado hotel, Coronado, Calif., April 20-21; national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, February 16.

Technical Association of the Pulp & Paper Industry, annual meeting Commodore hotel, New York, February 20-23.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11.

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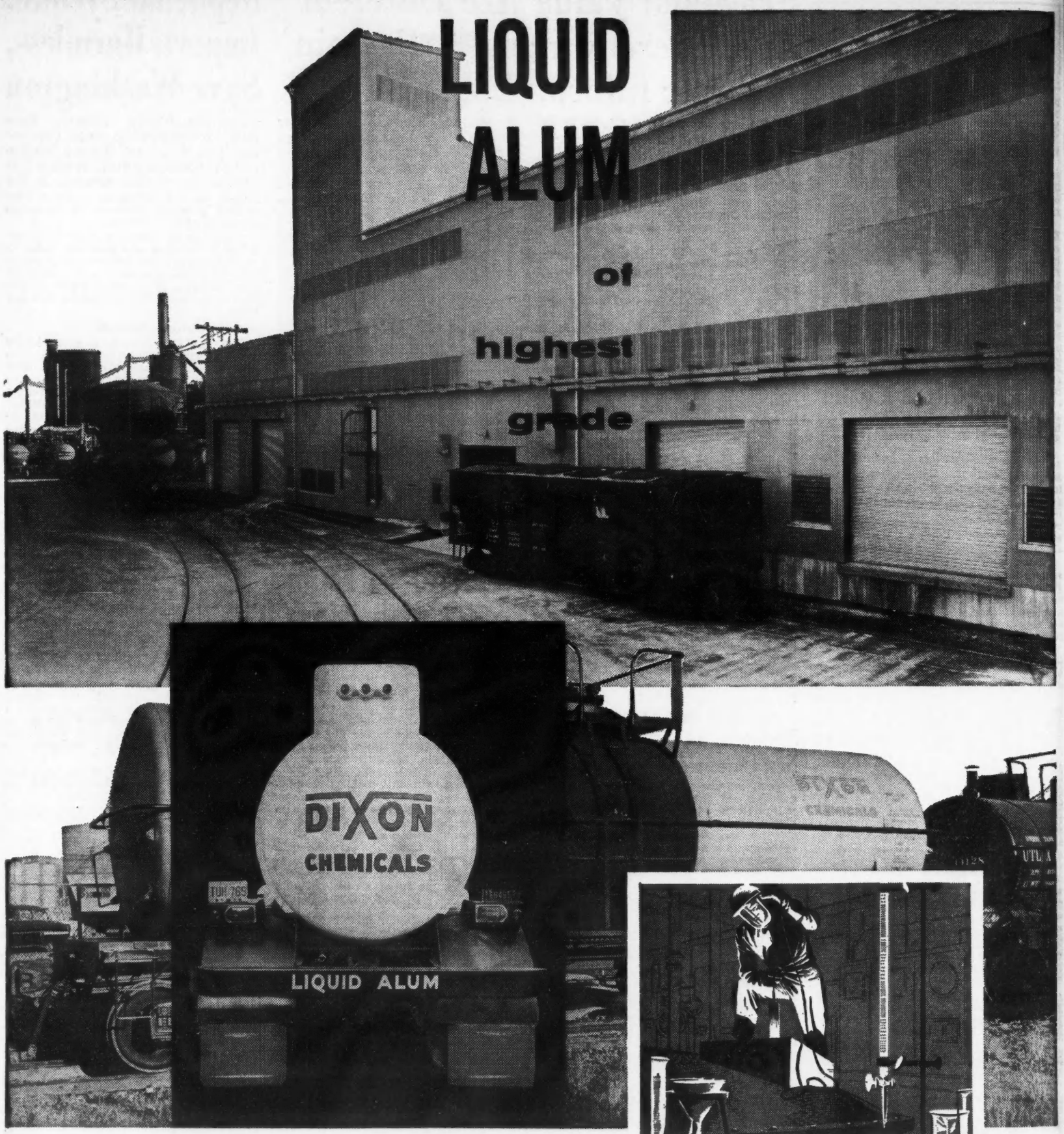

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European Chemical Patents: A Legal Jungle for the World-Minded

—Continued from page 8

patents, and the possibly more torturous business of negotiating licenses, thinks the Montecatini polypropylene patent comes "within a whisker" of pre-empting the synthetic rubbers as well.

And while he believes Montecatini's position in polypropylene is solid—at least in Europe—he thinks the field is still wide open in polybutadiene and the other new rubbers.

The "composition-of-matter" patent of E. I. duPont de Nemours & Co. on linear or high-density polyethylene and its effect in the US on the positions of Dr. Karl Ziegler and Phillips Petroleum Company, whose patents are tied to processes, stirs a good deal of debate in European chemical circles.

'Chemical Substance' Patents

Many countries (including Austria, West Germany, Poland, Norway and Russia) expressly exclude "chemical substance" patents by law, while granting full patent coverage to the processes for producing chemicals. The granting of chemical substance patents in Great Britain is a relatively new thing, according to a leading British attorney.

The patent situation in drugs has been well-publicized, since Italy and Rumania and a few other countries bar medicines from patent protection by law and "pirate" drug companies have mushroomed as a result. But in Denmark, Finland, Germany, Norway, Sweden and Russia the law allows drug processes to be patented, while excluding the medicines themselves.

At the last session of the Union Convention for the Protection of Industrial Property, created in 1883, a report by a committee suggesting that all members of the convention grant composition-of-matter patents was rejected and sent back for further study.

The union operates under a rule of unanimous decision, so the negative vote of any one of its nearly fifty members is a veto.

The Soviet Union, significantly for a country figuring so prominently in chemical patent policies, is not a member of the convention, though it sent an observer delegation to the 1958 meeting in Lisbon.

Even in countries which grant chemical substance patents, there is debate among chemical patent specialists over the desirability of the practice. The argument highlights the fact that in European eyes a patent is not an absolute right to monopoly following a discovery, but rather a kind of economic contract between the state and an inventor.

"A professor who discovers a new substance with a laboratory method that would cost a million dollars a pound should get full patent protection on the substance as produced by his process," argues one executive of an international chemical concern, "and his patent should be no barrier whatever to the exploitation of a patent for producing the same substance as pennies a pound."

In this man's eyes the significant discovery, from the point of view of a government granting a patent monopoly, is the economic process. An executive colleague in the same company takes the opposite point of view, arguing that a chemical substance is as much a discovery as anything else.

Easily the most obvious divergence in chemical patent practice, though, between European and American firms currently takes place in the Moscow Patent Office.

ICI Has Two Soviet Fiber Patents

The fibers division of Imperial Chemical Industries, for example, has received two Russian patents relating to chemical intermediates used in the manufacture of synthetic fibers.

ICI is taking a leading role among European firms in pushing chemical sales to Russia and in selling the Soviets chemical processes and know-how. But it is far from alone.

"We used to think of Russia as a Communist patent vacuum," says one chemical company executive. "Now we're seeing what getting a Russian patent involves and what it's worth when we have it."

There is a direct connection between Russian patents and exports to the Soviet Union, for under Soviet law a patent confers an import monopoly on the holder until the product covered is domestically produced.

European firms trying to sell chemical processes and know-how to the Soviets also are beginning to think they may have a sounder commercial position if they're first protected with Russian patents.

Soviet patents aren't cheap. A British Patent Office delegation which visited Moscow estimates that before the recent devaluation of the ruble a Soviet patent over its fifteen-year life cost its owner in initial and renewal fees about $4,300 against $2,440 in Germany and $485 in Britain. The renewal fee for a Russian patent goes up from 220 rubles a year for the first three years of its life to 2,530 rubles for the fifteenth year.

'Author's Certification' in USSR

Over 99 percent of all Soviet inventions are covered by an "author's certificate," which assigns all rights to the state. While a Russian inventor can apply for either a patent or an "author's certificate," in practice all Soviet citizens opt for the certificate since it involves no application or renewal fees and royalties are tax-free. As a result, almost all the tiny number of patents are held by foreigners.

According to the Russian Patent Office, about 25 percent of a total 40,000 applications for patents or certificates a year are rejected. Of the total approved, though, only about one hundred are patents and the balance are certificates.

The Soviet law requires the Patent Office to accept or reject an application within four months. Moscow officials gently explained to their British visitors that there is no reason to fear "bureaucratic methods and red tape" since the law explicitly forbids both.

Russian patent search is known to be thorough, and the Moscow office generally farms out searches to the relevant scientific institute and asks for an opinion from the scientists working in the field. Whether the patent is granted or not, this method insures a curtain amount of "dissemination of knowledge"—to Russian scientists at least.

Early Publication of Material

A major consideration for chemical patent applications in Russia and a few other countries is the early publication of material. But European experts think the situation in Belgium or Australia in this regard is actually worse.

No examination for patent novelty is made in Belgium and patent specifications are available to the public within a few months. In Australia complete specifications are laid open to public inspection six months after they are filed.

With keen international competition, company patent policy of European companies is a closely guarded subject and few will discuss it in anything but general terms.

R. W. Ball, senior foreign patents attorney for duPont, estimates that the average large American chemical company has 12,000 to 15,000 foreign patents in force, and that the total cost of getting and maintaining them runs into seven figures.

Among the biggest European companies, executives with careful anonymity estimate that their firms have "about the same number." But some choose to describe their policy as "selectively aggressive" and weed out patents ruthlessly.

One of the biggest keeps its total world patent file on tables around two walls of a room roughly ten feet wide and eighteen feet long, with a coded card for each patent in every country.

The German chemical firms generally are considered by their competitors to be the most aggressive patent-getting organizations in Europe. Many consider the German firms more "patent-conscious" than others, including American companies.

Officials of non-German firms also believe getting chemical patents in Germany is more difficult than in most other countries. This is largely due to an acute shortage of really competent German patent attorneys and agents, a Dutch executive explains.

Patent Men Mostly Technically Trained

The patent staffs of most European firms, particularly the German companies, are built mainly around technically trained men. In many countries, patent attorneys are not directly connected with the legal profession and almost all of them have a technical education, followed by qualification for patent work.

The British patent examinations are considered about the stiffest in Europe—the record number of successive failures by one candidate is twenty-three and it is considered normal to take the exam three or four times before passing.

One standard part of the British exam requires the candidate to prepare adequate patent applications for the London office and two other countries.

European international chemical companies tend to concentrate their whole patent effort with the parent company and work through agents, even in countries where they have subsidiaries.

In addition to the novelty and industrial worth of inventions, patent men have to watch a number of economic factors. The requirment in most countries that renewal fees, sometimes rising steeply over years, be paid on patents in force is a constant pressure for weeding out.

US Is 'Odd-Man-Out'

But the most important single factor is the requirement in many industrial countries that a patent must be "worked" or licensed to remain valid.

"The United States is 'odd-man-out' in the world on this working business," one chemical company official says. Under the provisions of most countries, failure to work a patent (use it commercially in the country) within a set period of time may bring revocation of the patent or compulsory licensing to a third party.

Such legislative provisions are part of the law in Denmark, Germany, Finland, France, Holland, Norway, Sweden, Switzerland and Great Britain. It has been a long-term policy of the international union to substitute compulsory licensing for revocation on failure to work a patent, since the threat of revocation can only have the effect of discouraging the filing for patents.

In general, these "working" regulations are approved by European chemical companies. "We look at it this way," explains one leading patent man: "The state grants a patent and thereby gives you as its part of the contract the full force of its power and legal machinery to protect your monopoly rights. It's only fair that the state get something from you in return and there's no reason why it should protect an 'idle' monopoly or guard a foreign company's exports."

As a matter of practice, European chemical companies say these patent working provisions are not so rigid as the statutes indicate. "Most countries will accept the economic facts of life, and not press you if either manufacture or licensing is economically stupid," one company man declares.

Pressure for Patent Procedures Grows

With so much diversity in patents and the acceleration of industrial scientific research, it is hardly surprising that pressure for effective international patent procedures is growing.

There are obvious reasons for this in the six-nation Common Market and some chemical company patent men expect the first "European patents" to be granted within a decade.

The actual position of patents under the Common Market's Treaty of Rome as it stands now, though, is rather vague. Some authorities believe that unless it is amended or "interpreted" the existing articles covering trade restrictions can play hob with the normal licensing arrangements of European chemical companies or non-European companies with patent positions in the Six.

Prof. G. H. C. Bodenhausen of the Hague, one of Europe's best known patent consultants, argues that the wording of the treaty now is "so wide" it may cover license agreements based on patents or trade marks "which provide for a division of markets or control of production, or for the fixing of different prices for the various countries concerned."

All of these, though probably illegal under American law, are quite standard and legal parts of European licensing agreements, following from the legal monopoly inherent in a patent during its life.

The only mention of patents in the treaty is in an article which states that the abolition of trade restrictions under the treaty will be no bar to national restrictions based on "protection of industrial and commercial property."

But it adds that such restrictions must not be arbitrary discriminations or disguised trade restrictions between member states.

A Single Euromart Patent

One way around these difficulties obviously would be creation of a single Common Market patent. Prof. Bodenhausen is none too optimistic about how soon this unification can take place, but he suggests that a first step might be to introduce "a certain measure of unification of the requirements for patentability."

Chemical industry associations already discussing patent harmonization problems, particularly the bitter pill of Italy's drug patent void, are seeing how difficult even such a first step as that is.

In Britain, not a member of the Common Market, Reginald Maudling, president of the Board of Trade—which is the

—Continued on page 50

PATENTS THE WORLD OVER

A Wide Diversity in Lifespans

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Belgium	20 years	Norway	17 years
Britain	16 years	Portugal	1 to 5 years
Bulgaria	15 years	Russia	15 years
Czechoslovakia	15 years	Spain	20 years
Denmark	15 years	Sweden	17 years
Finland	15 years	United States	17 years

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Current MARKET Quotations

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Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, comi., or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., c.l., dlvd. E 100 lbs. 18.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E .. 100 lbs. 15.25 - —
tanks, dlvd., E ..... 100 lbs. 10.00 - —
USP, tanks, dlvd. E ... 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 —
tanks, dlvd. E ..... lb. .14 —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l, dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
dms., l.c.l., dlvd ..... lb .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. .34½- —
dms., l.c.l., frt. alld ..... lb. .36 - —
tanks, frt. alld ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms. 1,000 lbs., frt. alld lb. 1.20 —
100-lb dms. 1,000 lbs. frt. alld. lb. 1.22 —
Acetophenone, cns. dms ..... lb 42 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - 1.45
dms., 100-lb. lots, same basis .. lb. 1.54 - 1.57
Acetylene black, imp. bgs., c.l., duty and freight extra lb. .20 —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb dms., c.c. pt. of shipt lb. 56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. 56¼ —
(Pink and green granulations 5c. per lb higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks. frt. alld E of Denver. lb. .33 —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb. .50 .55
Acrolein, tech., dms., c.l., works lb. .36 —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 —
dms., l.t.l., same basis lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld. lb. .38 - —
tech., polymerization, tanks, same basis lb. .38 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 —
Agar, USP Kobe No. 1, strip, bls. lb. 2.75 - 3.00
powd., 30 mesh., fib. dms lb 2.40 - —
dl-Alanine, dms., 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb .28 - —
Aldrin, tech. fib. dms. c.l., t.l. dlvd lb .99 - —
fib. dms., l.c.l. dlvd lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs lb. 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c higher W of Rockies

Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd ..... lb. .32½- —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,950 lbs. works lb. 1.55 - —
lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd ... lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms ..... lb. .60 - .70
Aloe, Cape, cs. ..... lb. .35 - .40
powd. cs ..... lb .60 - .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate.
artif.	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F.	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt.	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
		grd.	ground	reg.	regular.
b.r.	boiling range	i.&a.	iron and aluminum	resub.	resublimed
bxs.	boxes			ret.	returnable
C.	centigrade	i.b.p.	initial boiling point	SD	specially denatured
cbys.	carboys	imp.	imported	s.d.	single distilled
CD	completely denatured	incl.	included	S E.	southeast
		indust.	industrial	sec.	secondary
c.i.f.	cost, insurance, freight	kgs.	kegs	secs.	seconds
		l-	laevo	s.g.	specific gravity
cks.	casks	lacq.	lacquer	shipt.	shipment
c.l.	carlots	lb.	pound	soln.	solution
cns.	cans	l.c.l.	less carlots	s.u.	standard unit
coml.	commercial	l.t.l.	less truckload	syn.	synthetic
conc.	concentrated	liq.	liquid	tanks.	railroad tankcars
CP	chemically pure	mfrs.	manufacturers	tech.	technical
cps.	centipoises	m-	meta	tert-	tertiary
cryst.	crystalline	m.a.p.	mixed aniline point	t.l.	truckloads
cs	cases	min.	minimum	t.w.	tankwagons
ctns.	cartons	m.p.	melting point	USP	U. S. Pharmacopoeia
cyls.	cylinders	N-	nitrogen		
d-	dextro	n-	normal	vis.	viscosity
dbl.	double	nat.	natural	VM&P	varnish makers & painters
denat.	denatured	neut	neutral		
dest-dist.	destructively—distilled	NF	National Formulary	W.	west
		NNR	New and Nonofficial Remedies	whse.	warehouse
dl-	dextro-laevo			w.w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Alcin, USP, bbls., dms., bgs ... lb. 3.25 3.70
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs. works. 100 lbs 4.55 - —
Lump, dms., works ..... 100 lbs 5.30 - —
Powd., dms., works ..... 100 lbs 5.45 - —
USP, burnt., dms ..... lb. .20 .21
USP hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms .... lb. .17 —
Alumina, calcined bgs. c.l., works lb. .0535- —
bgs., l.c.l., works ..... lb. .056 .0830
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 —
Aluminum chloride comi. anhyd., dms., c.l., works, frt equald lb. .16 - —
dms. l.c.l. works lb 16½- —
cryst. dms. c.l works 100 lbs. 21.00 - —
dms., l.c.l. works 100 lbs. 21.50 - —
Soln., 32° cbys., c.l., works lb 0495- —
cbys., l.c.l., works lb .0570- .1025
tanks, works 100 lbs. 3.95 - —
NF, gran., dms. works lb. .31 .32
Aluminum fluoride tech., anhyd., bgs., c.l. works lb. .16¼ —
bgs., l.c.l. works lb. .17¼ - .19¼
bulk, c.l. basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l. works. 100 lbs. 11.50 —
Aluminum hydrate, heavy bgs. c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb lots same basis lb. .0395- —
bgs., 2,000-20,000 lb lots same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Aluminum hydroxide, dried, USP XV fib dms., works lb. .82½- —
fib dms., contract, works lb. 79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works. lb. .19 - —
fib. dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c. per lb. for 50-lb dm., 3c. per lb. for 10 lb can and 5c to 12c. per lb. for smaller containers. Deduct 1c per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l., same basis ton. 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works .... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton. 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 - —
bgs. l.c.l., same basis 100 lbs. 8.65 -12.00
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton. 325 - —
dms., ten lots, ex whse 100 lbs. 22.86 - —
dms., smaller lots, ex whse 100 lbs. 24.11 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

EFFICIENT ABSORPTION...EXCELLENT STABILITY

STABLETS—vitamin B_{12} adsorbed on a pharmaceutical grade ion-exchange resin—has been found to be an efficiently absorbed form of B_{12}. In addition, this B_{12} resin adsorbate is exceptionally stable in dry multivitamin and multivitamin-mineral formulations.

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Ammonium bichromate, dms., works lb. .43 - .43
Ammonium bifluoride dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l. t.l. frt equald lb. .44 - —
dms l.c.l. same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms. c.l lb. .15½- —
Ammonium chloride, white, tech., fine gran. bgs. c.l. works. 100 lbs 6.00 —
bgs. l.c.l., works 100 lbs 8.00 8.45
USP gran. 250-lb dm lb 17¼- —
Ammonium citrate dibasic, 250-lb. dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech., 200-lb. dm. f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous)
Ammonium iodide NF, 25-lb. jar, f.o.b works lb 4.28 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. 20½- —
dms. t.l.l. frt. alld lb .21½- —
tanks frt alld lb. 19½- —
Ammonium lignin sulfonate, bgs., c.l. works 100 lbs 3.25 —
bgs. l.c.l., works 100 lbs. 3.40 3.65
Ammonium linoleate 80% dms., works lb. .50 .55
Ammonium molybdate, CP cryst., 400 lb dms. 15,000-lbs works. lb 1.22 - —
400-lb dms. 2,000-lb contracts, works lb 1.23 - —
400-lb dms. works lb 1.24 - —
Ammonium nitrate, dom., fertilizer grade 33.5% N bgs. f.o.b works ton.67.00 - —
Ammonium nitrate, dom., with dolomite 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N eastern, bgs. c.l., ship't point frt. equald to $3 ton base price ton.70.00 - —
Ammonium oxalate, tech., fine gran. 250-lb dm. f.o.b works E lb. .28½- —
Tech. powd. 300-lb dm., same basis lb 28½- —
Ammonium pentaborate, gran. bgs., c.l. works ton 193.00 —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs. smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $1c per ton higher in bags
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 —
dms. smaller lots, works lb. .20 .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs. l.c.l., same basis lb. .10 —
Dibasic NF, V, bbls., dms lb. .46 —
Dibasic, tech. bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼ .13¾
Ammonium sulfamate bgs. c.l., t.l., works lb. .19 —
bgs. l.c.l. works .20½ .27
Ammonium sulfate standard granular bulk f.o.b works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb bgs., f.o.b works lb. .08½- —
Large granular bulk, c.l. works ton.35.00 -
bgs. c.l., works ton 40.00 - —
Tech. bulk c.l. t.l., works ton 52.00 - —
bgs. c.l., t.l., works ton 56.00 - —
bgs. l.c.l. t.l.l. works 100 lbs 3.20 3.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald. 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate tech. cryst. dms. c.l. works lb. .20 - —
dms. l.c.l. works lb. .22 .26
Tech. soln., 50%, tanks, frt. equald. basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb 4.50 6.00
d-Amphetamine phosphate, fib dms., 100-lb. lots lb.15.00 —
dl-Amphetamine phosphate, dms.lb 4.20 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 5.60
Amyl acetate ex fusel oil, tech., dist from 125° to 150°C., dms. c.l., frt alld E. of Rockies lb .18½- .19
dms l.c.l. same basis lb. .20 .20½
tanks, same basis lb. .16 .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 —
dms. l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech dms. c.l. dlvd. lb. .17 —
dms l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Amyl acetate syn. oxo process, dms., c.l., dlvd lb. .19 —
dms. c.l. dlvd lb. .20½- —
tanks, dlvd lb. .16¼ —
Amyl alcohol ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l. frt. alld lb. .20½- —
tanks, frt alld lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l. frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms. c.l. frt. alld E lb. .17 - —
dms., l.c.l., frt. alld E. lb. .18½- —
tanks, frt. alld E lb. .14½- —
Amyl alcohol 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms. l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
3-pentanol, dms., c.l., works lb. .65 - —
dms. l.c.l., works lb. .70 - —
tanks works lb 60 —
Amyl n-butyrate, dms. lb 1.00 1.25
Amyl cinnamic aldehyde dms lb 1.70 2.20
p-tert Amyl phenol, dms. c.l., works. lb. .28 - —
dms., l.c.l., works lb. .29 - —

Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms lb. 1.50 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls. lb. .50 - 1.00
Angelica root oil, bots. lb.120.00 -140.00
Angelica seed oil, bots. lb.120.00 -130.00
Aniline dms., c.l., frt. alld. lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs. min., frt alld lb. .33 - —
dms., l.c.l., same basis lb .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Mexican, bgs. lb. .24 —
Spanish, bgs lb. .24 —
Anisic aldehyde, dms lb 1.50 2.20
o-Anisidine, dms. c.l., frt. alld lb .80 —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. 42½- —
dms. l.c.l., minimum shipment 1,000 lbs., same basis lb. 45 - —
Anthranilic acid, 99% 150-lb. dms., dlvd lb 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt alld lb. .70 - —
bbls., l.c.l., same basis lb. 73 - —
Electrical grade, bgs. l.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 —
cs., c.l., mines lb. 29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. 26½- —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb dm., same basis lb. 74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
1-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb .75 —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l. works lb .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb .30 - .40
Powd., bbls., dms lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton 75.00 - —
7F, c.l. (30 tons), mines ton 71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton 41.00 - —
7TF c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton.43.00 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 —
Aspirin (see Acetylsalicylic Acid)
Atropine, NF, tins oz. 6.50 - 7.50
Atropine sulfate USP, bots oz 5.25 5.75
Azelaic acid, bgs., c.l., dlvd. lb. 40 —
bgs., ton lots, same basis lb .41 —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 —
less than 1,000,000,000 units, 50,000 units. .70 —
Balm of Gilead buds, dried, bgs lb. 1.25 1.35
Barberry root bark, bgs lb. 1.00 1.10
Barbital, NF 100-lb dms., f.o.b. works lb. 4.50 —
Barbital sodium, NF, 100-lb dms. lb. 4.75 —
Barium carbonate, precip., bgs., c.l., works ton.111.50 —
bgs. smaller lots, works ton.126.50 —
Barium chlorate, dms., works lb .32 .41
Barium chloride anhyd., bgs., c.l., works ton.176.00 —
bgs., l.c.l., works ton.196.00 —
NF, cryst., dms., 400-lbs., works.lb 23 - —
Tech., cryst., bgs., c.l., works. 100 lbs 7.00 - —
bgs., l.c.l. works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l., t.l., frt equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).

Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., t.l., dlvd. lb. .17 - —
Barium oxide, grd. dms., c.l., t.l., frt equald ton275.00 - —
dms., l.c.l., t.l. frt equald ton.285.00 - —
Barium peroxide, dms. frt. equald. lb .20 - —
Barium stearate, ctns. c.l., frt. alld. lb. .41 - —
ctns., l.c.l. same basis lb. .42 - .46
Barium sulfate, tech (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb dm. lb. .19 - —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ton.110.00 - —
Barytes, southern off-color, bgs. mines ton 30.00 - —
95-75%, bgs., mines ton.30 00 - —
white, water-grd paper bgs. c.l. St. Louis ton.60.00 -60.25
paper bgs. ex whse New York ton 84.85 —
Battery acid, cbys. c.l., works &. 100 lbs 2.35 —
cbys, l.c.l., works. E 100 lbs 2.65 -10.95
Bauxite, bulk, mines ton 7.00 -10.00
Bay oil NF Puerto Rican 50-55%, cns lb. 3.25 - —
55-60%, cns. lb. 3.60 - —
NF, West Indian, 50-55% cns. dms lb. 3.75 - —
Bayberry wax, bgs lb. .65 - .70
Beeswax, crude, African, bgs lb. .54 - .55
Brazilian, bgs. lb. .58 - .59
Central American, bgs. lb. .57 - .58
Chilean, bgs lb. .59 Nom
Refd. USP bleached white, bricks 100-lb. ctns lb. .67 - .69
white, slabs, 100-lb. ctns lb. .66 - .68
yellow, bricks, 100-lb ctns lb .59 - .61
yellow, slabs, 100-lb ctns lb .58 - .60
Belladonna leaf, bls. lb. .24 - .26
Belladonna root, bls. lb. .28 - .35
Bentonite, dom 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99 00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots ex whse ton.97.16 - —
Benzal chloride cbys., works lb. .44 - —
Benzaldehyde, NF dms lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La gal. .34 - —
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Houston, Tex. gal. .34 - .40
Johnstown, Pa gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Port Arthur, Tex. gal. .34 - —
Benzene, pure or nitration, tanks, works:
St. Louis, Mo. District gal. .34 - —
Sparrows Point, Md. gal .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind gal .34 - —
Youngstown, Ohio gal. .34 - —
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit, .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit, .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit, .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit, .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .33 - .37
dms., l.t.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .32 - —
Benzophenone, dms lb. 1.35 - 1.40
Benzotriazole, tech. dms., 1,000-lb. lots, works lb. 1.95 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys. dms., c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.06
Benzyl acetate, f.f.c. cns., dms lb. .54 - —
Benzyl alcohol, NF, dms. lb. .54 - —
Tech., dms. dlvd lb. .47½- .65
Benzyl benzoate, USP, 40-lb dms.lb. .62 - —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 - —
dms., l.c.l., same basis lb. .24 - —
tanktrucks, dlvd., Metropolitan area lb. .21 - —
Benzyl cinnamate cns. lb. 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms. same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.70 - 1.85
Benzyl isoeugenol, cns lb. 8.20 - 8.30
Benzyl propionate, bots lb. 1.30 - 1.35
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb.56.50 - —
Berberine hydrochloride, bots lb.56.50 - —
Bergamot oil, nat. NF Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b-g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride, tech.).
Biotin, cryst, bots gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude, cns lb. 1.50 1.90
Rectified, cns. lb. 1.75 2.00
Bismuth chloride, fars lb. 5.11 —
Bismuth hydroxide, dms lb. 4.60 4.65
Bismuth metal, bxs, ton lots lb. 2.23 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm lb 3.70 - —
Bismuth subgallate, NF, 200-lb dm. f.o.b. works lb 3.98 - —
Bismuth subiodide, fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b works lb 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .30½- —
bgs. c.l., t.l. less than 70,000 lbs., same basis lb. .31 - —
bgs., l.c.l., same basis lb. .32½- —
Blackberry root bark, bls lb. .50 .55

BLACK PIGMENTS

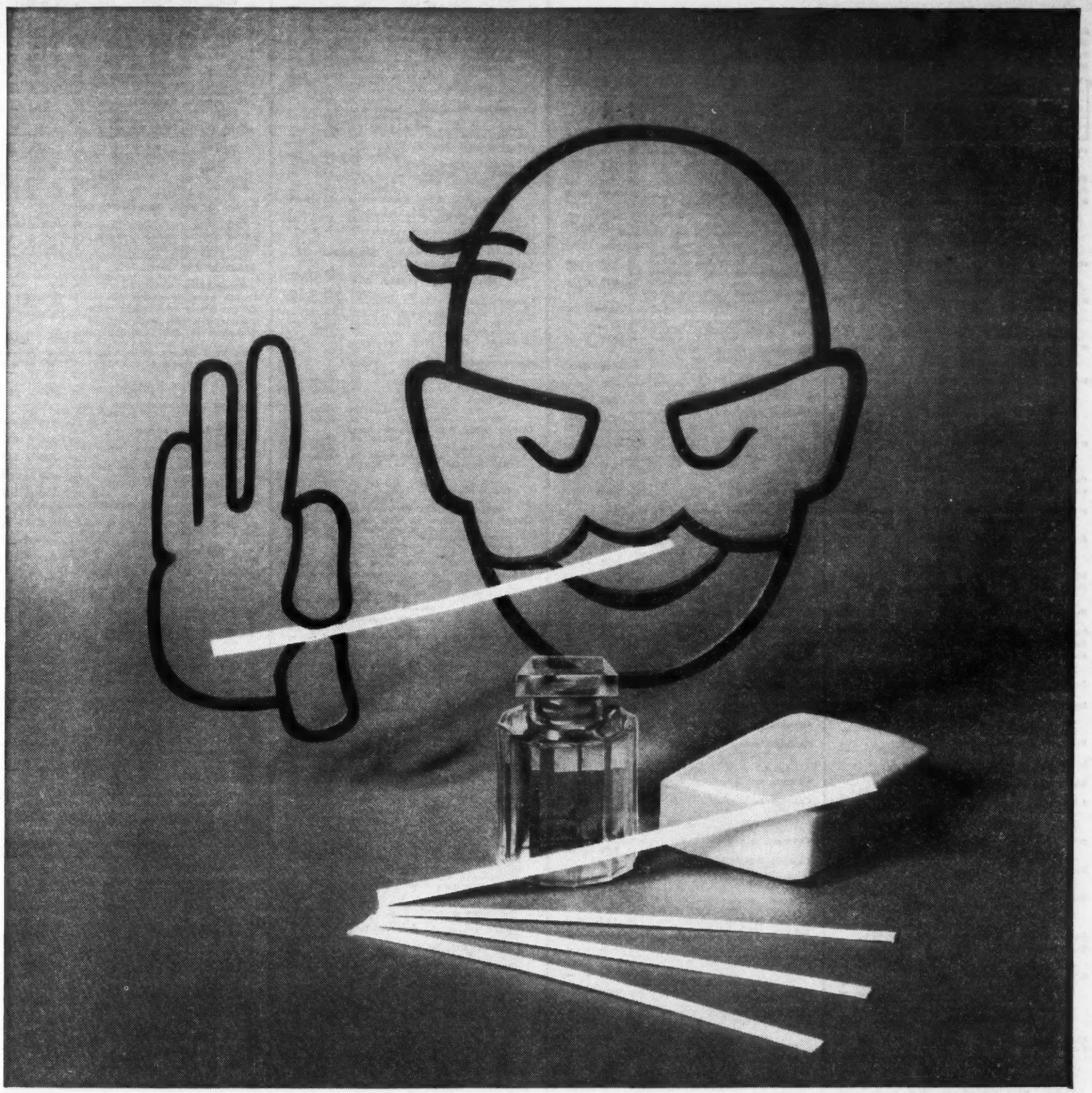
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black

Blanc fixe, direct process, bgs., c.l., works ton.160.00 —
bgs., l.c.l. works ton.170.00 - —
bgs., l.c.l., New York whse ton.215.00 - —
Blood, dried 16-16½% ammonia, bgs., New York unit-ton. 5.50 - —
Bloodroot, bls. lb. .85 .90

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 2.05 - —
Peruvian, dms. lb. 1.65 - —
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. lb. 1.50 —
Bone black, dms., c.l., frt. alld lb. .1750- .2225
l.c.l., works lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb higher
Bonemeal, steamed works, & ton.80.00 - —
Bone phosphate defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate tribasic)
Borax, tech. anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 7.67 - —
bgs. smaller lots same basis 100lbs. 8.91 -10.91
bulk, c.l. works ton 83.00 —
Borax, tech., gran., decahydrate, 99½% bgs. c.l., works. ton.50.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 5.31 - —
bgs. smaller lots same basis 100 lbs. 6.56 - 8.56
bulk, c.l., works ton 43.50 —
pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs. smaller lots same basis 100 lbs. 7.37 - 9.37
bulk, c.l., works ton.58.00 —
USP, powd., bgs. c.l., works. ton.54.00 - —
bgs. ton lots ex whse, New York or Chicago 100 lbs. 6.57 - —
bgs. smaller lots, same basis 100 lbs. 7.82 - 9.82
Bordeaux powder, tribasic bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton.335.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs.21.27 - —
bgs. smaller lots, same basis 100 lbs.22.52 -24.52
cryst., 99.9% bgs., c.l. works ton.163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.67 - —
bgs., smaller lots, same basis 100 lbs.12.92 -14.92
Boric acid, tech., cryst., 99.9% dms., c.l., works ton.188.50 - —
dms., ton lots, ex whse., New York or Chicago 100 lbs.13.17 - —
dms., smaller lots, same basis 100 lbs.14.42 - —
Boric acid, gran., 99.9%, bgs., c.l., works ton.112.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 8.78 - —
bgs. smaller lots, same basis 100 lbs.10.03 -12.03
dms. c.l., works ton.137 00 —
dms., ton lots, ex whse, New York or Chicago 100 lbs.10.29 - —
dms. smaller lots, same basis 100 lbs.11.54 - —
bulk, c.l., works ton.106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots, same basis 100 lbs.10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs.10.71 - —
dms., smaller lots, same basis, 100 lbs.11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l. dlvd. E. of Rockies lb. .31 —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb .47 - —
Bromoform, pharmaceutical grade, 5-gal, cby., frt. equald lb. 1.98 - —



Refresh your product with HEYDEN BENZALDEHYDE

As an odorant, flavorant* or an intermediate, Heyden Benzaldehyde will help to refresh your product.

The leading supplier to manufacturers of aromatic chemicals, pharmaceuticals and dyestuffs, Heyden offers both N.F. and Technical grades.

Another sound idea: turn to Benzaldehyde as a raw material in your new product development. Write for samples and technical data.

*Benzaldehyde (Benzoic Aldehyde) is a substance recognized by the Food and Drug Administration as safe for use in foods as a synthetic flavoring. (Federal Register, August 12, 1960, Vol. 25, page 7698).

HEYDEN CHEMICAL DIVISION
Heyden Newport Chemical Corporation
342 Madison Avenue, New York 17, New York

.2317

Bromstyrol, bots ..... lb 5.25 - 5.35
Brucine, cns ..... oz Nominal.
Brucine sulfate, NF, cns ..... oz. 1.45 - 1.75
Buchu leaves, bbls ..... lb. .70 - .75

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example prices on Brown, iron oxide, may be found in the I's under iron oxide brown.

Butadiene, retd cyls, c.l., refy lb .21 —
cyls., l.c.l., refy lb .22 —
tanks, dlvd lb .12¾- —
Butene-1, tanks works lb .0625- —
Butene-2, tanks works lb .0570- —
n-Butyl acetate ferment, dms., c.l., frt alld lb .17 —
dms., l.c.l., same basis lb .18½- —
tanks, same basis lb .14½- —
Syn, dms c.l., dlvd E lb .17 —
dms., l.c.l., same basis lb .18½- —
tanks, same basis lb .14½- —
sec-Butyl acetate syn dms., c.l., dlvd E lb .14¾- —
dms., l.c.l., same basis lb .16¼- —
tanks, same basis lb .12¼- —
n-Butyl acrylate, dms. c.l or t.l., straight or mixed frt. alld. E lb. .37½- —
dms., l.t.l., same basis lb. .38½- —
tanks, same basis lb. .35 - —
n-Butyl alcohol, ferment, dms., c.l., frt alld lb. .18 —
dms., l.c.l. frt alld lb. .19½- —
tanks, frt. alld lb. .15½- —
n-Butyl alcohol syn. dms., c.l., dlvd lb. .18 —
dms., l.c.l., frt. allo lb. .19½- —
tanks, dlvd lb. .15½- —
Sec-synthetic dms., c.l., dlvd lb. .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb. .12½- —
n-Butyl alcohol, tert-synthetic, dms., c.l. frt alld., dlvd E lb. .16 —
dms., l.c.l. same basis lb. .17½- —
tanks, same basis lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms., c.l., works lb .27½- —
dms., l.c.l., works lb .38¼- —
n-Butyl ether dms., c.l., works lb .35¼- —
dms., l.c.l., works lb .36 —
tanks, works lb .33¼- —
Butyl lactate, dms. c.l. frt. alld. E. Rockies lb .42½- —
dms., l.c.l., same basis lb .43½- —
tanks, same basis lb .40 —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 —
dms. l.c.l. works lb. .55½- —
Butyl oleate retd. dms., l.c.l., works lb .32 —
Butyl phenylacetate, dms. lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate)
Butyl stearate dms c frt alld E of Rockies lb .27¼- —
dms., l.c.l., same basis lb .28¼- —
Butylamine (see Mono- Di- and Tri-butylamine).
tert-Butylamine dms. c.l., t.l., f.o.b. works lb .47 - —
dms., l.c.l., same basis lb .47½- —
tc., t.l., same basis lb .45 - —
Butylated hydroxyanisole, food grade dms dlvd lb 4.75 - —
6-tert-Butyl m cresol (see Mono-tert-butyl m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl p cresol)
1,3 Butylene glycol dms. c.l., t.l., dlvd lb 20½- —
dms., l.c.l., t.l., f.o.b works lb .22 - —
tanks, dlvd lb .18 - —
p-tert-Butylphenol bgs., c.l., dlvd., lb .27½- —
bgs. l.c.l., works lb .28½- —
Butyraldebyde, dms., c.l., dlvd lb .22 —
dms., l.c.l., dlvd lb .23½- —
tanks dlvd lb .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone dms., c.l. t.l., works. lb .40 - —
dms l.c.l same basis lb .42 - —
B-Butyronitrile, dms., c.l., dlvd lb .56½- —
dms., l.c.l., dlvd. lb. .57½- —
tanks, dlvd. lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt alld E of Rockies lb 5.35 - —
Light shade, bbls., same basis lb 4.65 - —
medium shade, bbls. same basis lb 5.30 - —
Medium light shade, bbls., same basis lb 4.90 - —
Orange-red shade, bbls., same basis lb 4.30 - —
Yellow, all shades, bbls frt alld E. of Rockies lb. 2.95 - —
Cadmium chloride, 400-lb dms., f.o.b. shipping point lb. 1.49 - —
Cadmium iodide 25-lb fib dms lb 6.75 7.00
Cadmium metal (see Cadmium sticks)
Cadmium nitrate, purif cryst. lb. dms., less than 5,000 lbs., f.o.b. shipping point, lb. .89 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .87 - —
Cadmium-mercury lithopone orange, deep shade bbls frt alld E. of Rockies lb. 1.70 - —
Cadmium-mercury lithopone red, dark shade, bbls same basis lb. 2.00 - —
Red, light shade bbls. same basis lb. 1.77 - —
Red, medium shade bbls same basis lb. 1.92 - —
Red, medium light shade bbls same basis lb. 1.85 - —
Red, maroon shade on same basis lb. 2.08 - —
Cadmium-selenide lithopone maroon, bbls., frt alld E of Rockies lb. 2.81 - —
Orange, bbls., same basis lb. 1.63 - —
Cadmium-selenide lithopone red, orange-red shade, bbls. same basis lb. 1.77 - —
Red, dark shade, bbls same basis lb. 2.61 - —
Red, light shade, bbls. same basis lb. 1.63 - —
Red, medium shade, bbls same basis lb. 2.28 - —
Red medium-light shade, bbls same basis lb. 2.05 - —

Cadmium-selenide, lithopone, yellow, all shades bbls frt alld. E. of Rockies lb. 1.24 - —
Caffeine, NF citrated, dms 500-lb. lots or more lb 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb 2.10 - —
Caffeine, USP nat., cryst, hydrous, dms. 100-lb lots or more, lb 1.96 - —
Caffeine, USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst hydrous dms 100-lb lots or more lb 1.96 - —
Cajuput oil, native cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb. .24 —
Calamus oil bots lb 12.00 20.00
Calciferol cryst. 10-kilo or more lots works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p aminosalicylate trihydrate fib dms, 100 lbs. or more frt adjusted lb 3.10 - —
Calcium bromide NF bars 100 lbs. or more lb. 1.10 - —
Calcium carbide standard generator size 600-lb dms. c.l., dlvd ton 140.00 - —
Calcium carbonate nat., dry grd., air floated, 325 mesh, bgs. c.l. works ton 10.50 - —
Calcium carbonate, chalk, whiting, 325 mesh bgs c.l. works ton 32.00 - 34.00
water-grd. ½ to 10 microns, bgs., c.l., works ton 30.00 —
10 to 30 microns bgs., c.l., works ton 17.00 - 18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton 30.00 - 38.50
bgs. l.c.l. works ton 45.00 - 53.50
medium bgs c.l., works ton 38.00 —
bgs. l.c.l works ton 48.00 - 53.00
Calcium carbonate, surface treated, bgs. c.l., works ton 42.00 - 44.00
bgs., l.c.l works ton 57.00 - 59.00
ultrafine bgs. c.l., works ton 117.50 - 167.50
bgs l.c.l. works ton 127.50 - 187.50
Calcium chloride conc. flake or pellet 94-97%, paper bgs., c.l works frt equald ton 29.30 - —
Flake, 77-80% paper ogs., c.l., works frt equald ton 32.00 - —
Liquor, 40% tanks frt equald ton 12.50 - —
Powd, 77% min paper ogs. c.l., works frt equald ton 37.00 - —
Purit., gran dms lb .27 —
Calcium chloride solid, 73-75%, dms., c.l., frt., equald ton 30.50 - —
dms. l.c.l works frt equald ton 36.00 - 73.00
USP gran dms lb .32 —
Calcium chromate bgs., dlvd lb .37 —
Calcium cyanide dms., c.l. dlvd E. of Rockies lb .20 —
dms., l.c.l. same basis lb .24 - .55
Calcium cyclamate 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb dm. ton lb. 73½- —
USP powd 100-lb dm. ton lb. .66½- —
Calcium hydride lump dms. works. lb. 2.20 3.00
Calcium hypochlorite, high test, gran 45-lb. cs. dlvd E. of Rockies cs. 23.85 - 25.60
100-lb dms same basis dm 32.30 - 36.55
Calcium hypophosphite dms. 1,000-lb lots lb 1.28 - —
Calcium iodide, 25-lb. jars, works. lb. 4.27 - —
Calcium lactate NF dms. f.o.b. works lb. .43 - .46
Calcium mandelate USP 150-lb. dm. works lb 3.25 - —
Calcium naphthenate, liq. 4% Ca., dms. frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo 25.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb 1.24 1.25
Calcium phosphate dibasic, USP, bgs. c.l. frt equald 100 lbs 16.00 - —
Dibasic feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton 81.00 - —
bgs. c.l., t.l., f.o.b Texas City works ton 75.50 - —
bgs., l.c.l., ton 96.00 - —
Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs. l.c.l. frt equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices
Calcium phosphate monobasic, bgs., 10,000-lb lots, frt equald, 100 lbs basis 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip. bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l. frt equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms. dlvd E of Rockies. lb. .34½- —
Prices W of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs or more f o b warehouse N Y lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate paint grade (see Wollastonite)
Calcium stearate, etns., c.l. lb. .39 - —
ctns., l.c.l lb. .40 - .44
Calomel NF mild, powd., dms., 100-lbs., f.o.b works lb 4.32 - —
NF mild, precip dms., 100-lbs., f.o.b works lb. 5.67 - —
Camphene 46° m.p. dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF dms., kgs lb. 3.63 3.70
Camphor, syn., tech., 1 bbl. or more. lb. .45 - —
USP, gran., powd., bbls., 1,000-lb lots lb. .53 - —
bbls smaller lots lb. .54 - —
tablets, etns., 1,000-lb. lots. lb. .80 - —
etns., 500-lb. lots lb. .81 - —
etns., smaller lots lb. .82 - —

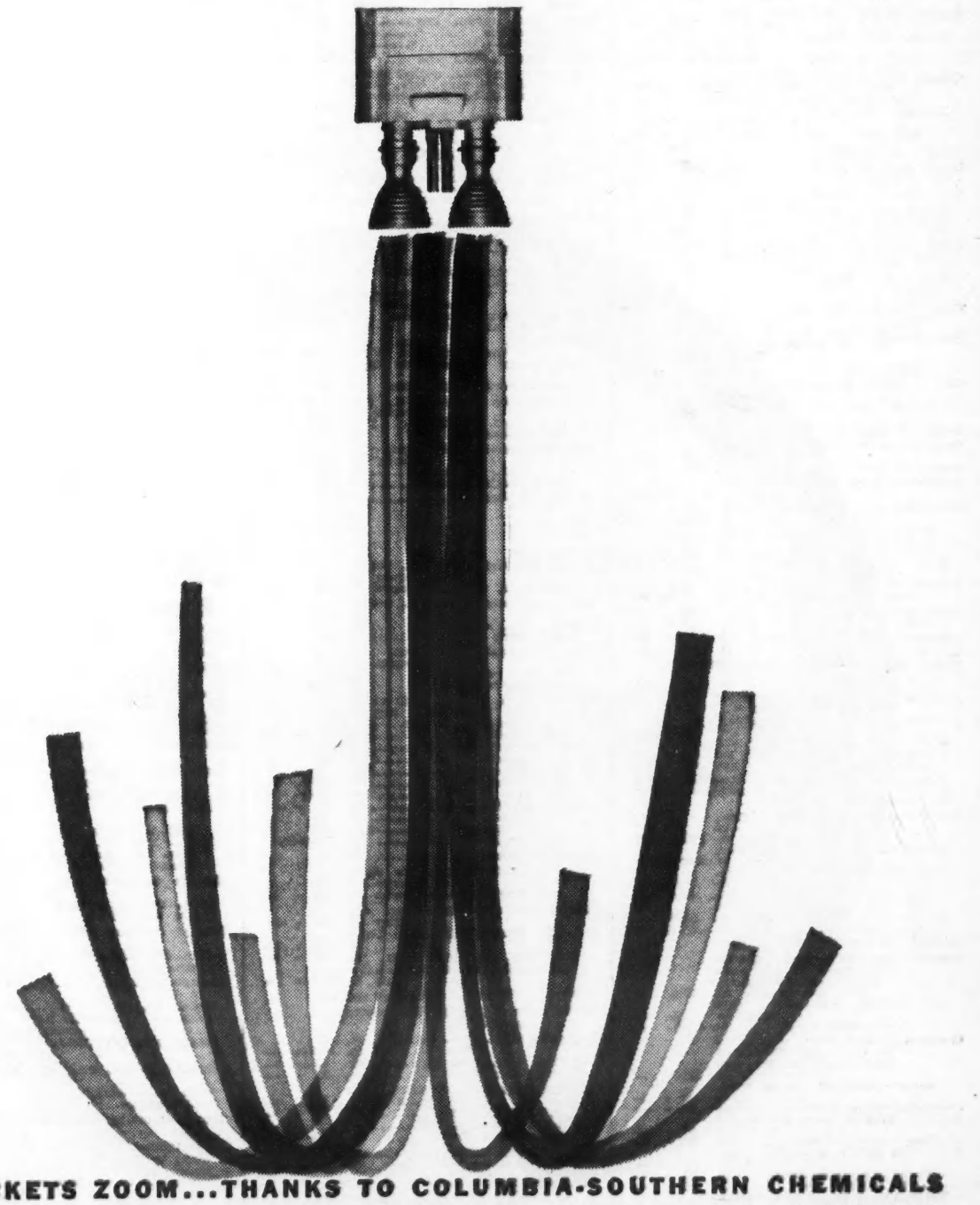
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .20 - .50
Cananga oil, native, cns. lb. 5.00 - 6.50
Rectified, cns. lb. 7.25 - 10.00
Candelilla wax, crude, bgs lb. .57 - .58
Refd., pure, bgs lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh, 3c. higher.
Cantharides, Chinese, cs. lb. 1.60 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb. 2.00 2.15
powd., bgs. lb. 2.15 2.30
Capric acid, dms lb. .27¼- .29¼
tanks lb. .24¼- —
Caprolatam monomer, bgs., c.l., t.l., f.o.b. works lb. .32 - —
bgs., l.c.l., t.l., same basis lb. .37 - —
tanks, same basis lb. .49 - —
Caprylic alcohol 85% dms., c.l., t.l., works lb. .19 - —
dms., l.c.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec. 92-99% dms., c.l., f.o.b. works lb. .22 - —
dms. l.c.l., t.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½- —
Caprylic acid, dms lb. .27¼- .29¼
tanks lb. .24¼- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.75 - —
Caraway seed Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .18 - —
Polish, bgs. lb. .17½- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs. c.l., works lb. .08½- —
bgs. l.c.l., works lb. .16¼- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns. l.c.l., whse. lb. .13½- —
Carbon black high abrasion, bulk, c.l., works lb. .07¼- —
bgs. c.l., works lb. .07¾- —
bgs. l.c.l., dlvd. or whse lb. .14½- —
high modulus bgs., c.l., works. lb. .06¼- —
ctns. l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs. ctns., l.c.l., whse lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .76 - —
ctns. l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton 60.00 - 115.00
bulk, 3,000,000 lbs. or more, dlvd Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms. l.c.l., same basis lb. .086 - .091
5-gal dms., 30 dms to c.l., same basis lb. .131 —
5-gal dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0520- —
Carbon tetrachloride, CP, consumers dms. c.l., frt. alld. lb. .12¾- —
dms. l.c.l. frt. alld. lb. .15¼- —
Tech. consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms. l.c.l. t.l.l. frt. alld lb. .14¼- —
tanks, frt alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms., 100-lb lots, works lb. 4.00 4.25
dms. smaller lots, works lb. 4.10 4.75
Cardamom oil, NF, bots lb. 43.00 - 45.00
Cardamom seed, bleached "A" lb. 3.45 - —
Bleached "B" lb. 3.15 - —
Decorticated Alleppey, cs lb. 2.15 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs lb. 2.10 - —
Ceylon, bgs. lb. 2.30 - —
Carmine No 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots. lb. .70 Nom.
North Country, No. 2, crude, bgs., ton lots lb. .80 - .82
refd., pure, ton lots lb. .87 - .88
North Country, No. 3, Ceara, crude, ton lots lb. .64 - .65
North Country, No. 3, Parnahyba, crude, ton lots lb. .66 - .67
No. 3, refd., pure, bgs., ton lots. lb. .74 - .76
No. 1, Ceara, yellow, bgs., ton lots. lb. .94 - .96
Parnahyba, yellow, bgs., ton lots. lb. .95 - .96
Powdered carnauba wax, 20 to 100 mesh 5c per lb higher.
Carotene, tech 1,250,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo. 240.00 —
Carvol, bots lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom. edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid precip., 80 mesh, bgs. 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .16¾- .17¼
Australian, bgs., c.l., same basis lb. .19¼- .19¾
New Zealand, same basis lb. .24 - .25
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½- —
Cassella acid dms. frt. alld., 100% basis lb. 1.44 1.75
Cassia oil, redist., USP cns lb. 7.50 9.00
Cassia, Padang, "A," bis lb. .31 - —
"B," bls. lb. .30 - —
"C," bls. lb. .29 - —
Korintje "A," bls. lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. lb. .2650- —

Castor oil, dom., dehydrated, bodied, dms., c.l lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2650- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2450- —
bgs., ton lots lb. .2850- —
bgs., l.c.l., dlvd. lb. .3050- —
Castor oil, dom., hydrogenated, No. 1, dms., c.l lb. .2200- —
dms., l.c.l. lb. .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
Refd. deod., dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Erat., tanks lb. .17½- .17¾
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. lb. .33¾- .34¼
Castor pomace, bgs., c.l., works ton 25.00 - —
Castoreum nat., cns lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½- —
Resub., dms., works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal.
Caustic potash (see Potash caustic)
Caustic soda (see Soda, caustic)
Cedarleaf oil, USP kID cns. dms lb 3.25 3.50
Cedarwood oil, cns., dms. lb. 1.00 - —
Celery seed, French, bgs. lb .37 - —
Indian, bgs. lb .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 - .51
Cellulose acetate-butyrate powd., 17% butyryl content, bgs., dlvd E lb. .545 - .555
27% butyryl content, bgs dlvd. E lb. .595 - .605
38% butyryl content, bgs. dlvd. E lb. .545 - .555
38% butyryl content, naif-second, bgs., dlvd E lb. .545 - .555
50% butyryl content, bgs. dlvd. E lb. .595 - .605
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 25,000-lb lots or more works, frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO, fib dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb 1.85 - 1.90
bgs., smaller lots, dlvd lb 2.15 - —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb .41½- —
fib, cns., l.c.l., same basis lb .43½- —
tanks, same basis lb .39 —
Extra, cns., c.l., t.l., dlvd E lb .48½- —
fib cns., l.c.l., same basis lb .50½- —
tanks, same basis lb .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb .85 - 1.00
Roman, cs. lb 1.50 - 1.75
Chamomile oil, blue Hungarian bots lb 350.00 - —
Charcoal, activated NF, fib dms. c.l., works lb. .34 - —
fib, dms., 5-ton lots, works lb. .35 - .35¼
fib dms., smaller lots works lb. .36 - .39
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk c.l., f.o.b plant ton 55.00 - —
briquets, bulk, c.l., f.o.b plant ton 80.00 - —
5-lb. paper bgs., c.l., same basis ton 105.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton 90.00 - —
40-lb. paper bgs. c.l same basis ton 85.00 - —
Chenopodium oil, NF, cns lb. 4.75 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .44 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb 1.00 - —
jars, 500-lb. lots lb 1.03 - —
jars, 100-lb. lots or less lb 1.05 - —
Chlordan, agricultural, dms., c.l., frt alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. allo lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt allo lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l., frt. allo lb. .15 - —
dms., l.c.l., 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l. works lb. .60 - —
ctns., l.c.l. works lb. .61 - —
125 cps. ctns., c.l., works lb. .70 - —
300 cps., ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls., t.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.65
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 7.25
Chloroacetic acid, mono, flake, 99% purif. dms. c.l lb. .23½- .25¼
dms. l.c.l lb. .24½- —
tech., flake, 96-97%, dms. c.l., frt, equald lb. .19 - —
dms., l.c.l. frt equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt allo lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt allo lb. .66 - —
m-Chloroaniline, dms. c.l., frt allo lb 75 - —
dms., l.c.l., same basis lb 77 - —
tanks, same basis lb. .73 - —

o-Chloroaniline, dms., c.l., frt. alld. lb. .52 • —
dms., l.c.l., same basis lb. .54 • —
tanks, same basis lb. .50 • —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 • —
dms., l.c.l., same basis lb. .79 • —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 • —
dms., l.t.l., same basis lb. 1.20 • —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 • —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 • —
fib. dms., smaller lots, works lb. 1.25 • —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works lb. 2.25 • —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 • —
Chloroform, tech., dms., c.l., divd. E lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .17 • —
Chloroform, USP, dms., c.l., divd. lb. .27 • —
dms., l.c.l., divd. lb. .30 • —
tanks, minimum 4,000 gals. divd. lb. .25 • —
2-Chloro-4-nitroaniline, paste, divd. E., 100% basis lb. .90 • —
Powd., divd. E., 100% basis lb. 1.00 • —
4-Chloro-2-nitroaniline, powd., divd. E lb. .86 • —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .73 • —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 • —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .20½ • —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
Chloropicrin, comi., cyls., 180 lbs., frt alld lb. 1.07 • —
cyls., 100 lbs., same basis lb. 1.08 • —
cyls., 50 lbs., same basis lb. 1.14 • —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0485- —
dms., l.c.l. frt equald lb. .0515- —
tanks, frt equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene tech. dms., t.l., works lb. .37 • —
dms., l.c.l., l.t.l., same basis lb. .38 • —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 • —
Choline chloride, 100-lb. dms., frt. equald lb. 1.25 • —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 • —
Chrome green CP dark, light, medium blue content, 1-15%, bbls. divd E of Rockies. lb. .43 • —
blue content, 16-30%, bbls., same basis lb. .44 • —
medium blue content, 31-45% bbls., same basis lb. .44 • —
blue content, 45-49%, bbls., same basis lb. .45 • —
Chrome green, reduced color 25%, bbls., same basis lb. .20 • —
Chrome green prices 1c. higher W of Rockies.
Chrome orange CP bbls., divd. E. of Rockies lb. .35 • —
Chrome orange prices 1c. higher W of Rockies.
Chrome yellow CP bbls., divd. E. of Rockies lb. .33 • —
Chrome yellow price 1c. higher W of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald. lb. .29½- —
dms., l.c.l., divd. N. Y. Metropolitan area lb. .30 • .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 • —
Chromium fluoride, bbls., works lb. .51 • .53
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt allid. lb. 1.20 • —
Pure, bgs., c.l., frt. allid. lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots. lb. 1.15 • —
Cinchona bark, NF, red, broken, bgs. lb. .25 • —
NF, yellow broken, bgs. lb. .35 • .40
Cinnamic acid, refd., bots. lb. 2.50 • 3.50
Cinnamic alcohol, bots. lb. 1.50 • 1.60
Cinnamic aldehyde, dms. lb. .80 • 1.00
Cinnamon, Ceylon, No. 2, bgs. lb. .53 • —
Ceylon, No. "0000," bgs. lb. .73 • —
Cinnamon bark oil, bots. lb. 42.00 • 48.00
Cinnamon leaf oil, crude, dms. lb. 1.60 • 2.00
USP (Cassia), cns., dms. lb. 8.50 • 13.50
Citral, CP, bots. lb. 4.50 • 5.00
Extra, bots. lb. 3.00 • 5.00
Syn., dms. lb. 7.25 • 7.40
Citric acid USP anhyd., fine gran., bgs., dms., c.l. lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt. lb. .30 • .30½
bgs., dms. smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l. lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt. lb. .28 • .28½
bgs., dms. smaller lots lb. .29 • .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms. lb. 1.00 • —
Java-type, dms. lb. 1.30 • 1.35
Citronellal, bots., dms. lb. 1.40 • 1.60
Citronellol, bots., dms. lb. 1.90 • 2.50
Citronellol, synthetic, dms. lb. 1.70 • —
Civet, artif., bots. lb. 13.75 • 15.00
Nat., bots. oz. 8.50 • 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton. 17.50 • 21.50
crushed shed moisture, bulk, c.l., Tenn. ton. 8.00 • 11.25
imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 • 47.00
lump, bulk, Atl. port net-ton. 31.50 • 37.50
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 11.00 • 17.00
Georgia, bgs., l.c.l., works. ton. 13.50 • 22.50
imp., white, lump, bulk, c.l. ex-dock, Philadelphia, Portland, Me. long-ton. 23.00 • 35.00
white, powd., bgs., c.l., ex dock. net-ton. 50.00 • —
bgs., l.c.l. ex whse net-ton. 60.00 • 70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 • —
Group 3 gal. .12875 • —
Houston, Texas gal. .145 • —
140°F Flash, tankcars, New Jersey or New York gal. .208 • —
Group 3 gal. .154 • —
Houston Texas gal. .17 • —
Cleve's acid, tech., mixed, solid, dms., frt. allid lb. 1.05 • —
1,6, tech. solid dms. frt. allid lb. .77 • —
1,7, tech., dms frt allid lb. 2.20 • —
Clove bud oil, USP, dms. lb. 2.65 • —
Zanzibar, bgs. lb. .41 • —
Clove bud oil USP dms. lb. 2.70 • 3.60
Clove leaf oil, crude, dms. lb. 1.25 • —

CMC, crude, 60-65% low or medium vis., bgs., 25,000 lbs., divd. E., 100% basis lb. .40 • —
90-95% low, or medium vis., bgs., less than 25,000 lbs., divd. E., 100% basis lb. .42 • .50
65%, low or medium vis., bgs., c.l., divd. E., 100% basis lb. .40 • —
l.c.l., divd. E., 100% basis lb. .42 • 1.00
purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. allid lb. .97 • —
bgs., smaller lots, same basis, lb. .59 • 1.00
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 • —
Refd., resale, indust., dms., c.l., ex whse gal. .33 • —
dms., l.c.l., ex whse gal. .39 • —
tanks, works gal. .20½- —
Coaltar pitch, aluminum, bulk, works. ton. 44.00 • —
Carbon and indust., bulk, works. ton. 42.00 • —
Core, bulk, works. ton. 40.50 • —
Fiber, bulk, works. ton. 48.00 • —
Roofing, 140-155°F., Federal Specification RP-281 Type I tanks, works ton. 41.00 • —
Cobalt acetate, 23.7% Co., dms., divd lb. 1.04 • —
Cobalt blue, genuine, 250 lb. bbls., divd. E. of Rockies lb. 4.90 • —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., divd lb. 1.45 • —
Cobalt chloride, 24.2% Co., dms., divd lb. .93 • —
Cobalt hydrate, 60-61% Co., dms., divd lb. 1.97 • —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 • —
Cobalt naphthenate flq., 6% Co., dms., divd lb. .48¼- —
Cobalt nitrate, 20.1% Co., bbls., divd. lb. .75 • —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., divd E of Mississippi R. lb. 1.15 • —
70-71% Co. kgs. same basis lb 1.12 • —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., divd lb. 1.33 • —
Cobalt resinate, fused, 3% Co., dms lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., divd lb. .64 • —
Monohydrated, 33% Co., dms., divd lb 1.09 • —
Cobalt tallate, 6% Co., dms. divd. lb. .44 • —
Cocaine, USP cns., 100-oz. lots, f.o.b works oz. 17.50 • —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz. 13.75 • —
Cocillana bark, bls lb. .18 • .20

Cocoa butter, bgs. lb. .56 • .58
Coconut oil, crude, tanks, New York lb. .13¾- —
tanks, Pac. coast lb. .12½- —
Refd., deodorized, dms. lb. .19¼- .20¼
Coconut oil acids, dist., dms. lb. .21½- .24
tanks lb. .19 - —
double dist. (stripped), dms. lb. .22½- .25
tanks lb. .20 - —
Cod oil, dms. spot lb. .08¾- .09½
Codeine, NF, cns., 100-oz. lots oz. 13.25 • —
Codeine hydrochlorids, cns., 100-oz. lots oz. 11.75 • —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 • —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 • —
Codliver oil, USP, dms. gal. 1.40 1.70
Cohosh root, black, bls. lb. .20 .25
Blue, bls. lb. .20 .25
Colchicine, USP, bots. 27.50 -29.00
Colchicum root, bls lb. .35 .45
Colchicum seed, bgs lb. .75 .80
Collodion, USP, dms. lb. .32½- —
USP flexible dms. lb. .34 —
Colocynth pulp, bls. lb. .75 —
Colombo root, bls lb. .16 .18
Condurango bark, bls lb. .18 .20
Congo copal gum, No. 1, bgs. lb. .26 .27
No. 2, bgs. lb. .23 .25
No. 3, bgs. lb. .21 .24
Copaiba balsam, cns., dms. lb. .82 - 1.10
Copaiba oil, cns lb. 1.35 2.00
Copper acetate, bbls., c.l., works. lb. .53 —
bbls., l.c.l., works lb. .54 • —



ROCKETS ZOOM...THANKS TO COLUMBIA-SOUTHERN CHEMICALS

Our country's missile and rocket program relies heavily on basic chemicals. Hydrazine, the high weight-to-energy fuel, is derived from ammonia. Soda ash and caustic soda are used in producing aluminum, the metal so highly favored for rocket and missile construction. And many of the intricate metallic mechanisms that go into the mighty "birds" are degreased with the solvent, trichlorethylene. Columbia-Southern supplies these and other basic chemicals to leading organizations in virtually every manufacturing and processing industry. Over the years, discriminating buyers have found that they like doing business with Columbia-Southern. You will too.

columbia | southern chemicals
CHEMICAL DIVISION
PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER PITTSBURGH 22, PENNSYLVANIA

Copper carbonate, 55%, dark dense, works lb.34.35 • —
bgs., l.c.l., works lb.35.85 • —
Copper chloride, cupric, anhyd., dms., works lb. .43½- .44
cryst., dihydrate, dms., works. lb. .29¾ .30¼
cryst., dried, dms., works lb. .37¾- .38½
Copper chloride, cuprous, dms., works lb. .3855- .4155
Copper cyanide, tech., dms. 20,000-lb lots or more lb. .609 —
dms. 1,000-lb lots or more lb. .619 —
dms smaller lots lb .639 .65
Copper gluconate dms lb 3.20 —
Copper hydrate dry, dms, c.l., frt. E of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 • —
Copper metal electrolytic, divd. Valley, basis lb. .29 • —
Copper naphthenate liq., 8% Cu, dms frt alld lb .28½- —
Copper nitrate tech. cryst. dms., works lb 30¾ .32¾
Copper oleate solid 9% Cu dms., works lb. 45 • —
Copper oxide black bbls., 100-5,000-lb. lots, works lb. .46 • —
Copper oxide, red 97% USN Type I bbls. 100-5,000-lb lots. lb. .46½- —
90% USN Type II, bbls. 100-5,000-lb lots or more, works lb. .45½- —
Copper quinolinolate 18% Cu, dms., ton lots lb 4.25 —
10% active quinolinolate dms lb 1.14 1.15
Copper resinate, precip. dms frt alld lb. .47 • —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs.12.00 • —
bgs., l.c.l., works 100 lbs.12.50 -15.00
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.22.65 • —
dms., l.c.l., works 100 lbs.23.40 • —
Tribasic, distributors, bgs., c.l., works 100 lbs.29.10 • —
bgs., l.c.l., works 100 lbs.30.60 • —
Copper undecylenate, dms lb 2.75 —
Copra, Atl., Gulf ports, c.i.f. ton.175.00 • —
Pac. ports, c.i.f. ton.170.00 • —
Coriander oil, USP, bots. lb. 6.50 - 7.25
Coriander seed, Moroccan, bgs lb .20 —
Rumanian, bgs. lb. .15 • —
Yugoslavian bgs lb .08½ —
Corn oil, crude, tanks, works lb. .16 • —
Foots (soapstock) acid, 95%, tanks, New York lb. .05½ Nom.
Refd., salad, dms lb. .2173- .22
tanks lb. .1973- —
Corn oil acids, dist., dms lb. .14¾- .17¼
tanks lb. .12¼- —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min. 100 lbs. 7.30 • —
paper bgs., l.c.l. 100 lbs 7.45 • —
Corn syrup, 43° Be., tanks, divd. N.Y. 100 lbs. 6.30 • —
non-ret. dms., c.l., same basis. 100 lbs. 7.23 • —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP bots., kilo or more gram. .95 - 1.75
Costus oil, bots oz. 6.00 —
Cottonseed meal, 41% bgs. Memphis ton.55.00 -55.50
Cottonseed oil, crude, tanks, South, East lb. .12½- .12¼
tanks, Valley lb. .12 • —
tanks, Texas, Lubbock lb. .12 Nom.
tanks, Texas, Waco lb. .12 Nom.
Foots (soapstock) acid, 95%, tanks, Texas, Waco lb. .03½- —
Refd., salad, dms. lb. .18 • .18¼
tanks, salad, dms. lb. .16 • —
Cottonseed oil acids, dist., dms lb. .14¾- .17¼
tanks lb. .12¼ —
Coumarin, NF, cryst., dms lb 3.30 3.40
Cramp bark, NF bls lb .90 1.00
Cream of tartar (see Potassium bitartrate)
Creosote carbonate, NF bots. chys., lb. 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt adjusted gal. .24 • —
Crude, soln 80%, tanks, works. gal. 226 • —
Refd., dms., c.l., works gal. 50 • —
dms., l.c.l., same basis gal 62 • —
tanks, same basis gal 38 • —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 30c per gallon for coaltar
Creosote, beechwood, chys., dms., f.o.b. works, divd. in Metropolitan area lb. 1.72 1.77
Hardwood, NF chys. dms., same basis lb. 1.42 1.47
Pinewood, dms. incl. c.l., works. lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 • —
Cresol, USP, 50% 204°C. dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 • —
non-ret. dms., l.c.l., same basis. lb. .19 • —
tanks, same basis lb. .16 • —
m-Cresol, 95-98% dms., c.l., works. lb. .60 • —
dms., l.c.l., works lb. .61 • —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .16 • —
2,97% 2°C. dms. c.l., frt. equald. lb. .22 • —
dms., l.c.l., same basis lb. .23 • —
tanks same basis lb. .20 • —
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt equald lb. .17 • —
ret. dms., l.c.l., same basis lb. .18 • —
tanks, same basis lb. .15 • —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
Cresol, 29°-29.9°C. m.p., dms., c.l., frt equald lb. .16 • —
ret. dms., l.c.l., same basis lb. .17 • —
tanks, same basis lb. .14 • —
25°-28°C. m.p., dms. c.l., frt. equald lb. .15 • —
ret. dms., l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Cresol, 98% dms., c.l., divd lb. .52 • —
dms., l.c.l., divd lb. .53 • —
tanks, divd. lb. 49 • —

2,3-Cresotic acid, dms., ton lots, works lb. .70 • —
dms., smaller lots, works lb. .72 • —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 • —
dms., l.c.l., same basis gal. 1.40 • —
tanks, same basis gal. 1.15 • —
metapara content 25% or less, dms., c.l., t.l. same basis gal. 1.20 • —
dms., l.c.l., same basis gal. 1.25 • —
tanks, frt. equald gal. 1.00 • —
Cresylic acid, coaltar, imp., metapara content 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms or more, gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 1.15
tanks, same basis gal. 1.00 • —
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .25 • —
Crotonic acid, dms., 200 lbs. or more, l.c.l., divd lb. .36 • —
Cryolite, nat. indust., bgs., c.l., works 100 lbs.13.00 • —
bgs., l.c.l. works 100 lbs.14.25 • —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs., t.t.l., works lb .22 • —
Cubeb berries, NF, bgs lb. 1.00 • —
Powd., cs. lb 1.15 • —
Cubeb oil, cns lb. 8.75 - 9.00
Cumene, dms., c.l., works lb. .12 • —
dms., l.c.l., works lb. .14 • —
tanks, works lb. .11 • —
Cumin seed, Iranian, bgs lb. .20 • —
Moroccan, bgs. lb. .36 • —
Turkish, bgs. lb. .19 • —
Cumin seed oil, bots, cns lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont. contract ton.57.00 • —
Fertilizer, pulv. 21% N, bgs., works unit-ton 2.85 • —
Cyanamide, fertilizer, indust grade, bgs, c.l., works ton.75.00 • —
bgs., l.c.l., works ton.96.00 • —
Indust grade 6-16 mesh, dms., c.l. works ton.120.00 • —
dms. l.c.l., works ton.140.00 • —
Cyclohexane, 99%, tech., dms., c.l., divd. E of Rockies gal 1.02 • —
dms. l.c.l. same basis gal. 1.10 • —
dms., c.l. divd W of Rockies gal. .77 • —
dms., l.c.l., same basis gal. .85 • —
tanks, works gal. .55 • —
98% tech 40-dm. lots or more, f.o.b works gal. .56 • —
5-39 dms. same basis gal. .60 • —
tanks, same basis gal. .36 • —
Cyclohexanol, tech., dms., c.l., works, frt alld E lb. .28½- —
dms., l.c.l. works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 • —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l. works lb. .34½- —
tanks, works lb. .31 • —
Cyclohexylamine, tech., dms., c.l., works lb. .49 • —
dms., l.c.l., works lb. .50 • —
tanks, works lb. .47 • —
Cypress oil, bots. lb. 5.30 • —

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2,4-D tech, bgs, dms., c.l., works, frt equald lb. .40 • —
bgs, dms, l.c.l., same basis lb. .45 • .49
2,4-D butyl ester, dms, c.l., works. lb. .43 • —
dms., l.c.l., same basis lb. .48 • .52
tanks, same basis lb. .42 • —
2,4-D isopropyl ester, dms., c.l., works lb. .43 • —
dms., l.c.l., works lb. .48 • .52
tanks, works lb. .42 • —
Dammar gum Batavia, A E, cs lb No stocks.
East India, Batu, bold, bgs lb. .15½ .18
nubs and chips, bgs lb. .10 • .11
black, bold, bgs lb. .16 • .18
nubs and chips, bgs lb. .13 • .14½
unscraped, bgs. lb. .13 • .14½
pale, chips, bgs lb. .16 • .18
pale, nubs, bgs. lb. .20¾ .24
Siam, cs lb. .31½ .34
Singapore, No. 1, bgs. lb. .38 • .44
No 2, bgs. lb. .29 .32
dust, bgs. lb. .18 .20
No. 3, bgs. lb No stocks.
Dandelion root, bls lb. .35 .40
DDD, tech., flake, grd., fib, dms., c.l., works lb. .45 • .47
fib, dms., l.c.l., works lb. .46 • .48
DDT, flake or lump, bgs., c.l., divd lb. .23 • —
bgs., smaller lots, same basis. lb. .25 • —
fib dms., c.l., same basis lb. .24 • —
fib dms., smaller lots, same basis lb. .26 • —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
i-Decanol, tech., dms., c.l., divd. E lb. .43½- —
dms., l.c.l., divd. E. lb. .45½- —
tanks, divd. E. lb. .41 • —
Decyl alcohol, mixed isomers, dms., c.l., divd lb. .23½- —
dms., l.c.l., divd. lb. .25 • —
tanks, divd. lb. .21 • —
Perfume grade, bots. lb. 1.00 - 2.00
Decyl alcohol, normal (see i-Decanol)
Deertongue leaves, bls. lb. .50 • .60
Defluorinated phosphate, feed grade, 14% P paper bgs., c.l., t.l., Tupelo, Miss ton.52.00 • —
18% P, paper bgs., c.l., Texas City ton.61.25 • —
paper bags, c.l., works, Miss. ton.66.00 • —
19% P, paper bgs., c.l., t.l., works, Houston, Tex. ton.66.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common (15-17% free fatty acid), 400-lb dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 13 • —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., divd E of Rockies. gal. .69½- —
dms., l.c.l., same basis gal. .74½ .80½
tanks, divd. same basis gal. .53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., divd. E. of Rockies gal. .72 • —
dms., l.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., divd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
Denatured alcohol, ethyl, SD1, tanks, same basis gal. .54½- —
SD2B, dms. c.l., divd. E. of Rockies gal. .69 • —
dms., l.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms. c.l., divd. E. of Rockies gal. .68 • —
dms., l.c.l. same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Denatured alcohol, ethyl, SD23A, dms., c.l., divd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
Denatured alcohol, ethyl, SD23H, dms., c.l., divd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
Denatured alcohol, SD29, dms., c.l., divd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l. divd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Denatured alcohol, ethyl, SD-35A, dms., c.l., divd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
Denatured alcohol, ethyl, SD-40, dms., divd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast divd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.40 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.19 • —
100 lbs. 9.34 • —
canary dark, paper bgs., c.l. 100 lbs. 9.03 • —
paper bgs., l.c.l. 100 lbs. 9.18 • —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 8.93 • —
paper bgs., l.c.l. 100 lbs. 9.08 • —
white paper bgs., c.l. 100 lbs. 8.77 • —
paper bgs., l.c.l. 100 lbs. 8.92 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 • —
bgs., l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs.14.70 • —
100-lb. dms. 100 lbs.15.20 • —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 • —
bgs. c.l., ex whse 100 lbs. 7.60 • —
USP dms. lb. .19¾ —
Diacetone alcohol, acetone-free, dms., c.l., divd lb. .15½- —
dms., l.c.l., divd. lb. .17 • —
tanks, divd lb. .13 • —
Tech., dms., c.l., divd. lb. .15 • —
dms., l.c.l., divd. lb. .16½- —
tanks, divd lb. .12½- —
Diacetyl, flavor grade, bots lb. 3.30 - 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Diallylamine, dms., c.l., divd. lb. .98½- —
dms., l.c.l., divd. lb 1.00 • —
tanks, divd. lb. .96 • —
o-Dianisidine, dry, tech., fib, dms. lb. 2.00 • —
Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., l.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., divd. lb. .65 • —
l.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., divd. lb. .65 • —
dms., l.t.l., same basis lb. .68 • 1.10
Tech., dms., c.l., t.l., divd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., divd. E lb. .31½- —
dms., l.c.l., l.t.l., divd. E lb. .33 • —
tanks, divd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., divd. E lb. .31½- —
dms., l.c.l., l.t.l., divd. E lb. .33 • —
tanks, divd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., divd. E lb. .31½- —
dms., l.c.l., same basis lb. .33 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 • —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., divd lb. .55½- —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., divd. lb. .28½- —
dms., l.c.l., divd. lb. .30 • —
tanks, divd. lb. .26 • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 • —
o-Dichlorobenzene, dms., c.l., frt. alld, E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 • —
dms. 2,000 lbs. or more, same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 • —
tanks, works lb. .32 • —
Dichlorodiphenyltrichloroethane (see DDT).

2,3-Dichloroethyl ether, dms., c.l., t.l., divd. E lb. .18½- —
dms., l.c.l., l.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., l.c.l., same basis lb. .75 • —
Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., l.c.l., works lb. .06 • —
tanks, works lb. .03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 • —
dms., l.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib, dms., c.l., works, frt. alld. lb. .47½- —
fib, dms., l.c.l., same basis lb. .49 • —
Dicyclopentadiene, dms., c.l., t.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 • —
Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tankcars, tanktrucks, 2,000 gals. lb. .26 • —
tanktrucks 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., divd. lb. 1.85 • —
dms., l.c.l. divd. lb. 1.90 • —
Diethanolamine, dms., c.l., divd E. lb. .27 • —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt alld lb. .27½- —
dms., l.t.l. frt. alld. lb. .28½ —
tanks frt alld lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., t.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., divd lb. .69½- —
dms., l.c.l., divd. lb. .71 • —
tanks, divd lb. .67 • —
Diethyl oxalate, dms., c.l., t.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., divd. lb. .29¾- —
dms., l.c.l., divd. lb. .31¼- —
tanktrucks, 1,000-1,999 gals. same basis lb. .27¾- —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. .27¼- —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 • —
dms., l.c.l., frt. alld. E lb. .22½- —
tanks, frt. alld. E lb. .18½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., l.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer, dms, c.l. t.l. works. lb 2.30 • —
5-44 dm. lots, works lb 2.35 • —
1-4 dm. lots, works lb 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 • —
Diethylamine, dms., c.l., divd E lb. .52 • —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 • —
dms., l.c.l., same basis lb. .58 • —
tanks, same basis lb. .55 • —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½- —
f.o.b., Zone 2 lb. .18½- —
dms., l.c.l., c.l., f.o.b., Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —
Diethylbenzene, tankcars, Zone 1 lb. .15 • —
Zone 2 lb. .16 • —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies.
Di-2-ethylhexyl adipate (see Di-iso-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-iso-octyl phthalate).
Diethylene glycol, dms, c.l., divd E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .55¾- —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾- —
dms., l.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, works lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., divd. E lb. .22½- —
dms., l.c.l., divd. E lb. .24 • —
tanks, divd E. lb. .20 • —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 • —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., divd. E lb. .21 • —
dms., l.c.l., divd. E lb. .22½- —
tanks, divd. E. lb. .18½- —
Diethylenetriamine, dms., c.l., divd. E lb. .44 • —
dms., l.c.l., divd. E. lb. .45½- —
tanks, divd. E. lb. .41½- —
Diethystilbesterol, USP, bots. 10-kilo lots kilo.100.00 -147.50
bots, 1-kilo lot kilo.110.00 -152.50
Digitalis leaves, USP, dom., dms lb 1.25 —
Digitoxin, USP, bots gram. 3.75 - 4.20
Diglycol laurate, dms., ton lots lb. .32½- —
Diglycol stearate, dms., t.l lb. .26 • —
Diglycolic acid, bgs, c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 • —
Dihexyl sebacate, dms., c.l., works. lb. .66 • —
dms., l.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate, bulk. gram. .03 • —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs or more lb. 1.11 • —
dms. 1,050 lbs. to 20,000 lbs. lb. 1.13 • —
dms. 150 lbs to 1,050 lbs lb. 1.15 • —
Di-isobutyl ketone, dms., c.l., divd. lb. .17 • —
dms., l.c.l., divd. lb. .18½- —
tanks, divd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., divd E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 • —
Di-isobutylene dms, c.l., divd. E lb. .10 • —
dms., l.c.l., divd. E lb. .11½- —
tanks, divd E lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., works lb. .29 • —
dms., l.c.l., same basis lb. .30½- —
tanktrucks, 1,000-1,999 gals., works lb. .27 • —
tankcars, tanktrucks, 2,000 gals., works lb. .26½- —

Di-iso-octyl sebacate, dms., c.l., works lb. .60 - —
dms., l.c.l., works lb. .61¼ - —
tanks, works lb. .60 - —
Di-isopropylamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24½- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms. lb. 5.25 - —
Dimethyl anthranilate, cns. lb. 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 - —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 - —
dms., l.c.l., dlvd. E lb. .79½- —
tanks, dlvd. E lb. .75½- —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .78 - —
dms., l.c.l., dlvd., 100% basis lb. .79½- —
tanks, dlvd., 100% basis lb. .75½- —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .31¼- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¼- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼- —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ref. dms., c.l., works lb. .17½- —
ref. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .17½- —
dms., l.c.l., works lb. .18½- .19½
tanks, works lb. .15 - —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 - —
dms., l.c.l., same basis lb. .37 - .38
tanks, same basis lb. .33 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms. l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis, lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.61 - —
Dinitroaniline orange toner prices 1c higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E lb. .17¾- —
tanks, frt. alld. E lb. .17 - —
2,4-Dinitrophenol, bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd. 63°C. dms lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld. E lb. .29 - —
dms., l.c.l., frt. alld. E lb. .30½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26½- —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl senacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½- —
dms., l.c.l., frt. alld. E lb. .33 - —
tanks, frt. alld. E lb. .29 - —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., t.l., dlvd. E lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., l.c.l., works lb. .62 - —
dms., l.c.l., ex whse. gal. .78 - —
tankcars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 - —
Diphenyl, bgs., c.l. t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .52 - —
dms., l.c.l., works lb. .54 - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .32 — —
bgs., l.c.l., same basis lb. .34 — —
Refd., fused, tanks, same basis lb. .29 - —
Refd., diphenylamine in dms., ½c. per lb higher
Diphenylguanadine, bgs., dms., ton lots, frt. alld. lb. .51 - —
bgs., smaller lots, frt. alld. lb. .53 - —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 — —
dms. l.c.l. frt. alld. lb. .18½- —
tanks, frt. alld lb. .14¼- —
Dipropylene glycol prices 1c. higher in West.
Dipropylene glycol methyl ether, dms. c.l., dlvd. E lb. .20 — —
dms. l.c.l. same basis lb. .21¼- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb lots, works lb. 1.80 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .71 - —
dms., smaller lots, frt. alld lb. .72 - —
Di-o-tolylthiourea, tech. solid, dms., c.l., t.l., frt alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis lb. 1.05 - —
tanks, same basis lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .75 - —
dms. l.c.l. t.l.l., same basis lb. .76 - —
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 - —
dms. l.c.l. same basis lb. .144 — —
tanks, same basis lb. .11½- —
Dodecylphenol, c.l., frt. alld lb. .22½- —
dms., l.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 - —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.15.65 -17.60
Green, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.19.60 -22.85
No. 3 lb.31.30 -35.90
Red, FD&C, No. 2 lb. 3.30 - 4.10
No. 3 lb.19.60 -22.85
No. 4 lb 5.55 7.50

Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb. lots. dlvd:
Violet, FD&C, No. 1 lb.15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 4.10
No. 6 lb. 3.30 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb.10.50 -10.95
Brown, D&C, No. 1 lb.15.65 -16.10
Green, D&C, No. 5 lb.15.65 -16.10
No. 6 lb.15.65 -16.10
No. 7 lb.14.35 -14.80
Orange, D&C, No. 3 lb.10.50 -10.95
No. 4 lb.19.60 -20.05
No. 5 lb 3.80 4.25
Red, D&C, No. 17 lb.10.50 -10.95
No. 18 lb.23.60 -24.00
No. 19 lb.15.00 -15.45
No. 21 lb 3.90 4.35
No. 22 lb.10.50 -10.95
No. 28 lb.24.15 -24.65
No. 33 lb.17.00 -17.45
Violet, D&C, No. 2 lb.15.65 -16.10
Yellow, D&C, No. 7 lb.10.50 -10.95
No. 8 lb.10.50 -10.95
No. 10 lb.13.05 -13.50
No. 11 lb.13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:
Blue, Ext., D&C, No. 1 lb.15.65 -16.10
Green, Ext., D&C, No. 1 lb.15.65 -16.10
Red, Ext., D&C, No. 1 lb.13.05 -13.50
Yellow, Ext, D&C, No. 1 lb.10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet 8N lb. 1.79 - —
13390 Fast blue SR lb. 1.57 - —
14025 Yellow 2G lb. 1.26 - —
14030 Orange R, extra, conc. lb. 1.64 - —
14645 Chrome black T lb. .77 - —
14720 Rubine XX, conc lb. 1.76 - —
15510 Orange Y, extra conc. lb. .83 - —
15575 Orange RR lb. .99 - —
15620 Fast Red A, conc lb. 1.61 - —
15705 Chrome blue black R, conc. lb. 1.12 - —
16150 Scarlet 2RL lb. 1.22 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 - —
16230 Fast light, orange 2G lb. 1.39 - —
17590 Brown PG lb. 3.00 - —
18050 Phloxine 2G lb. 1.16 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast yellow 2G lb. 2.52 - —
19140 Yellow XX lb. 2.48 - —
19555 Yellow NN, conc. lb. 3.67 - —
20170 Brown Y lb. 1.33 - —
20470 Blue black, extra, conc. lb. 1.51 - —
21010 Brown, RX, conc lb. 1.42 - —
22240 Scarlet B lb. 2.81 - —
22310 Red FC lb. 1.57 - —

Dyes, coaltar for general use in cloth dyeing numbers are those of the Color Index scale or prototype), contract dlvd. No.
22311 Brown MCW lb. 1.59 - —
22610 Blue 2B, extra conc lb. 1.51 - —
23500 Red 4BX, conc. lb 1.80 — —
24410 Sky blue FF, extra, conc. lb 1.95 — —
24895 Brilliant yellow, conc. lb 3.27 — —
26360 Navy blue 3R, conc. lb. 1.84 - —
26695 Black F, conc. lb 2.30 — —
26900 Milling Red 3R, conc lb 2.24 — —
27075 Neutral black 2B, conc lb 2.75 — —
27720 Gray L lb 2.18 — —
29185 Fast scarlet 4BNC lb 2.23 — —
30015 Diazo black VJ conc. lb 2.49 — —
30045 Yellow brown K, extra lb. 1.45 - —
30235 Black EB, 200% lb. 1.33 - —
30295 Green BY conc. lb. 1.07 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb 1.85 - —
40000 Yellow 2G lb. 1.44 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V, crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B, conc. lb. 4.78 - —
42640 Violet 4BXN lb. 2.43 - —
43830 Brilliant blue, BBG lb. 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.54 - —
58005 Alizarin red SC lb. 3.64 - —
59700 Golden orange GFD, single paste lb. 2.70 - —
89710 Flaming orange 6RD double powder lb. 4.90 - —

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6978

Dyes—Ferric Chloride

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract, dlvd, No.
59800 Dark blue BO, single paste, lb 2.28 —
59825 Jade green NG supra double paste, lb. 1.75 - —
61570 Alizarin green SG extra lb 3.81 - —
63010 Alizarin blue SAPG lb 3.90 - —
63615 Alizarin blue black B lb 3.26 - —
69825 Blue BLFD double paste lb 2.76 - —
70805 Brown BR single paste lb 2.03 —

Dyes, coaltar oil-soluble, 100-lb drums, dlvd, No
12140 Oil scarlet BL lb 1.87 —
12055 Oil orange 7078 V lb 1.38 - —
26120 Oil red N 1700 lb 1.94 - —
42535B Methyl violet base lb 1.88 - —
44045B Victoria blue base lb 4.06 - —
50415B Oil black 8603 lb 80 - —
61565 Alizarin cyanine green base lb 6.13 - —

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black BB lb. 3.89 - —
Spirit brown GN lb. 5.30 - —
Spirit orange R conc. lb. 5.87 - —
Spirit red B conc. lb 6.41 - —
Pr 517 Spirit yellow 2R conc lb 4.62 - —
Pr 554 Spirit blue THN lb 5.06 - —

E

Echinacea root, bls. lb 1.25 —
Elm bark grinding, bls. lb 30 .32
Powd., bbls., bxs lb. .60 - —
Select, bundles lb 75 —

Emetine hydrochloride, USP, bots. oz.48.40 - —
Endrin, tech, dms., 100-lbs or more, 100% basis, dlvd lb. 2.77 - —
Eosin red toner, bbls, works lb 1.95 - —
Ephedrine syn., USP, anhyd., bots. 100-oz lots oz. .98 - 1.00
hydrous, bots, 100-oz lots, oz. .92 - —
Ephedrine hydrochloride NF dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate USP, cryst, dms., 100-oz f.o.b works oz. .73 - —
USP, powd., dms., 100-oz. same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .27 - —
d-Epinephrine base, syn. USP bots, 100 gram lots gram .58 - —
Epsom salt (see Magnesium sulfate)
Erigeron oil cns lb 11.00 —
Ergot, NF, dms., tin-lined lb. 2.00 - 2.50
Eserine salicylate, bots oz.34.50 -40.00
Eserine sulfate, bots. oz 86.00 —
Ester gum, gum rosin type, dms., c.l. dlvd. Ill., Md. Ky., E. States Minneapolis, N. C., Ohio St Louis, St Paul Va., W Va lb 18½ —
Wood-rosin type dms. c.l. same basis lb 18½ —
Ether (see specific product).

Ethyl acetate, nat., ferment, 85-88%, dms., c.l. dlvd lb. .13 —
dms., t.c.l., dlvd. lb. .16½- —
tanks dlvd lb .12½- —
95-98% dms. c.l., dlvd. lb. .15¼- —
dms., t.c.l., dlvd. lb .16¾ —
tanks, dlvd lb .12¾ —
Ethyl acetate nat., ferment, 99%, dms., c.l. dlvd lb .15½- —
dms., t.c.l., dlvd lb .17 —
tanks, dlvd lb .13 —
syn. 85-88% dms., c.l., dlvd lb .15 —
dms., t.c.l., dlvd. lb .16½ —
tanks, dlvd lb. .12½ —
Ethyl acetate syn. 95-98%, dms., c.l., dlvd lb .15¼- —
dms., t.c.l., dlvd lb .16¾ —
tanks dlvd lb .12¾ —
99% dms. c.l. dlvd. lb .15½- —
dms., t.c.l., dlvd. lb .17 —
tanks dlvd lb .13 —
Ethyl acetoacetate, dms., c.l., dlvd. lb 58½- —
dms., t.c.l. dlvd. lb .60 —
tanks, dlvd lb .56 —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .34¾- —
dms., l.t.l., dlvd lb. .35¾- —
tanks, dlvd. lb. .32¼- —
Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd E of Rockies gal 20.63 —
dms. t.c.l. same basis gal. 20 73 -20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms. c.l. dlvd E of Rockies gal 68 —
dms., t.c.l., same basis gal. 78 .89
tanks, same basis gal 52 —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E of Rockies gal 21 75 —
dms., t.c.l., same basis gal. 21 85 -21.96
tanks, same basis gal 21 59 —

Ethyl alcohol, denatured (see Denatured alcohol, ethyl)
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .30 —
dms. t.c.l. same basis lb. .31½- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots. lb. .75 1.00
Ethyl bromide tech., 66%, dms., c.l., frt. alld, E lb. .43 - —
dms. t.c.l. frt alld. E lb. .45 - —
tanks, frt. alld. E lb. .40 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 —
dms., t.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms t.c.l., t.l. works lb. .36¾- —
tanks works lb. .34 — —
Ethyl butyrate, dms, works lb. .85 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 4 cps., ogs., 5,000 lb lots or more, frt. alld E lb. .73 - —
bgs. smaller lots frt alld E lb. .75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt alld E. lb. .70 —
Ethyl chloride tech. cyls., works. lb .20 .22
dms., works lb 18 20
tanks works lb 10
Ethyl cinnamate, cns lb. 3.15 3.35
Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb 43½ —
dms. t.c.l. dlvd E lb. 44½ —
tanks dlvd E lb 41½ —
Ethyl ether absolute ACS dms lb .27 —
Anesthesia USP dealers 1-lb cns lb 1.01 —
½ lb cns lb 1.09 —
¼ lb cns lb 1.21 —
Indust. dms. c.l. dlvd. lb .13½ —
dms., t.c.l., dlvd E lb .15 —
tanks dlvd E lb .11 —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd E lb .37 —
dms. t.c.l., t.l., dlvd E lb .38½ —
tanks, dlvd E lb .34½ —
2-Ethyl hexoic acid 1c higher W of Rockies.
2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed, frt alld, E lb. .39½- —
dms., l.t.l., same basis lb. .40½- —
tanks, same basis lb. .37 - —
2-Ethylhexyl alcohol, dms., c.l., dlvd, E lb. .23¾- —
dms., l.c.l., dlvd. E lb. .25¼- —
tanks, dlvd, E lb. .21¼- —
Ethyl iodide chys, works lb. 3.30 —
Ethyl methacrylate dms, c.l., frt. equald lb .52 —
dms. t.t.l. frt equald lb .52½ —
tanks frt equald lb 50 —
Ethyl morphine hydrochloride, USP bots oz.11.85 —
Ethyl oenanthate, dms lb 1.05 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist (see Tetraethyl orthosilicate).
Ethyl silicate 40% available SiO, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E lb. .42 - —
N-Ethyl-a-naphthylamine, dms, works. lb 1.04 —
N-Ethyl-m-toluidine tech., uq., tanks frt alld lb .83 —
N-Ethyl-o-toluidine, bbls lb. .88 —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline dms, c.l. frt. alld. lb. .57 —
dms. t.c.l. frt alld lb. .58 —
tanks, frt alld lb. .55 —
Ethylbenzene 99% dms., c.l., t.l., frt, equald lb. .14 - —
dms., t.c.l., same basis lb. .16 - —
tanks, same basis lb. .11½- —
Ethylene, contract refy gate lb .0475 .052a
Ethylene dibromide dms., c.l., frt. equald lb. .30½ —
dms., t.c.l. frt equald lb .31½ —
tanks frt equald lb .28½ —
Ethylene dichloride dms. c.l., dlvd. lb .11½- —
dms., t.c.l., same basis lb .13 —
tanks, same basis lb 09 —
Ethylene dichloride prices W of Rockies, 1c. per lb higher
Ethylene glycol indust. dms., c.l., dlvd E lb. .16 —
dms., t.c.l. same basis lb. .17½ —
tanks, same basis lb. .13½ —
Ethylene glycol monobutyl ether, dms. c.l., dlvd E lb. .22 —
dms. t.c.l., dlvd E lb. .23½- —
tanks, dlvd E lb. .19½- —
Ethylene glycol monoethyl ether, dms. c.l. dlvd. E lb. .21 —
dms., t.c.l. dlvd E lb. .22½- —
tanks, dlvd E lb. .18½- —
Ethylene glycol monoethyl ether acetate dms. c.l. dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .17 —
Ethylene glycol monomethyl ether, dms c.l. dlvd. E lb. .21 —
dms., t.c.l. dlvd E lb. .22½- —
tanks, dlvd E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
lb. .29 —
dms., l.c.l., works lb. .29¾- —
tanks, works lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —
Ethylene oxide dms. c.l. dlvd E. lb. .21½- —
dms., t.c.l., dlvd E lb. .24½ —
tanks dlvd E lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms., c.l., dlvd E., 100% basis lb. .42 - —
dms t.c.l. dlvd E. 100% basis. lb. .43 - —
tanks dlvd E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP, cns, dms lb. .85 1.40
Eucalyptus oil NF rectified, 70-75%, dms. lb. .45 —
NF rectified, 80-85% dms. lb .53 .62
Eugenol, tech., dms lb. 0.00 - —
USP, dms. lb. 1.90 - —
Euphorbia herb, bls lb. .12 .16

F

F salt paste tech dms. works lb 2.30 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed Argentine, bgs. lb .16 —
French, light, bgs lb. .16 —
Indian, light, bgs lb. .17½- —
Rumanian, bgs lb. .14 —
Yugoslav light bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .08 —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. t.c.l. works 100 lbs 8.50 —
Ferric chloride, indust., cryst., bbls., c.l., works 100 lbs. 5.25 6.75
bbls. t.c.l. works 100 lbs 5.75 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt equald, 100% basis 100 lbs 4.00 —
USP, cryst., dms., t.l., works lb. .06½- —

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Ferric citrate, gran., dms. ..... lb. .96 - —
Ferric hypophosphite, NF, 175-lb. dm lb. 4.25 - —
Ferric naphthenate, liq., 5% Fe, dms., frt alld lb. .28½- —
Ferric oxalate, tech., gran., 50-lb. dm. f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran, pearls, 225-lb. dm lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
Ferric stearate dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt alld lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton.35.25 - —
bgs., l.c.l., works ton.36.25 -42.25
bulk, c.l., works ton.33.25 - —
Ferric-ammonium citrate, NF, brown, gran., 100-lb. dms lb. .63 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton.34.50 - —
bgs., l.c.l., dlvd Metropolitan area 100 lbs 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls gal.34.00 -35.00
Oregon bbls gal. 3.40 - 4.64
Fir oil, Canada, cns lb. 1.70 - 1.75
Fish oil, refd., alkali, dms. lb. .1300- .1350
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton.92.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton.88.00 - —
Fleaseed (see Psyllium seed)
Folic acid, USP, bots., fib. dms., kilo lots or more gram. .25 - —
10% feed grade fib dms., 3 kilos or more kilo.30.00 -44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0695- —
tanks, dlvd. lb. .0405- —
Formaldehyde, methanol-free (unninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, ois lb. .65 - .70
Fumaric acid tech., 250-lb. dms., c.l., frt. equald lb. .23¼- —
dms., l.c.l., frt equald lb. .24¾- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J. lb. .20½- —
dms., l.c.l., t.l., Newark, N. J lb. .21½- —
dms., c.l., t.l., Memphis, Tenn lb. .19 - —
dms., l.c.l., t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. lb. .175 - —
Fusel oil, refd, dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. lb. .19½- —
tanks, dlvd lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsemium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls., bxs lb. .30 - —
Geraniol, extra, cns., dms. lb. 1.75 - 2.40
Soap grade, dms lb. .90 - 1.75
Standard, cns., dms. lb. 1.65 - —
Synthetic, dms lb 1.30 - —
Geranium oil, Algerian, cns. lb. 22.00 -23.00
Bourbon, cns. lb. 22.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 1.90 - 2.70
Synthetic, dms lb. 1.45 - —
Ginger oil, dist., bots. lb. 11.50 -14.00
Ginger oleoresin, NF, from African root, bots lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .28 - —
Jamaican, No. 3, bgs. lb. .28 - —
Nigerian, split, bgs. lb. .22 - —
Sierra Leone, bgs lb. .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 88 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-200, bgs., c.l., dlvd lb. .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½- —
267-298, bgs., c.l., dlvd lb. .32½- —
299-330, bgs., c.l., dlvd lb. .34½- —
331-362, bgs., c.l., dlvd lb. .36½- —
363-394, bgs., c.l., dlvd lb. .38 - —
Glue, hide, 395-427, bgs., c.l., dvld. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
Bots., 50-kilo lots kilo.100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification 88%, tanks, dlvd. lb. .1670- .1760
nat., crude, soapiye, 80%, tanks, dlvd lb. .1520- .16
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .28¾- —
dms., l.c.l., dlvd lb. .29¾- —
tanks, dlvd. lb. .27½- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .28 - —
dms., l.c.l., dlvd lb. .28¾- —
tanks, dlvd. lb. .26¼- —
nat., high gravity, dms., c.l., dlvd lb. .28¾- —
dms., l.c.l., dlvd lb. .29½- —
tanks, dlvd. lb. .27 - —
Glycerine, dom., syn., dms., c.l., dlvd lb. .29 - —
dms., l.c.l., dlvd lb. .29¾- —
tanks, dlvd. lb. .27½- —
Imp., nat., crude, soapiye, 80%, c.l.f. lb. .15 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.10 - —
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.25 - —
Grapefruit oil, dms lb. 2.75 - 2.90
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd lb. .08⅞- .09
Yellow, tanks, dlvd lb. .05⅞- .05¾
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .11 - —
dms., l.c.l. lb. .13 - —
tankcars lb. .09½- —
Extra winter, strained, dms., c.l., same basis lb. .13½- —
Grease, extra winter, strained, dms., l.c.l. lb. .15¾- —
tankcars lb. .12 - —
Prime, burning, dms., c.l., same basis lb. .15 - —
dms., l.c.l. lb. .17 - —
tankcars lb. .13½- —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green

Grindelia robusta herb, bls. lb 40 —
Guaiacol, NF, cryst., dms., tins lb 2.10 2.15
NF liq., cbys., dms. lb 2.30 2.40
Guaiacwood oil, cns. lb .65 .80
Guaiacol carbonate, NF VII, dms lb 3.40 3.45
Guar gum, food grade, bgs., c.l lb .38 —
bgs., 5,000 lbs or more lb .39 —
Indust., bgs., c.l. lb .32 —
Tech grade, bgs. lb .30 .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls, c.l., frt. alld. 100% basis lb. 1.00 —
bbls., l.c.l., same basis lb. 1.05 —

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anhydrous HBr

with extra advantages for you

Years of experience are behind Michigan Chemical's new expansion of its captive anhydrous hydrogen bromide facilities. This expansion enables us to make this valuable processing chemical available to customers. Shipments of commercial quantities are now being made from our plant at Saint Louis, Michigan, and from warehouse stocks at Port Newark, New Jersey. From both points we will continue to supply 48% and 62% grades of hydrobromic acid.

Besides securing highest-quality anhydrous HBr, customers of Michigan Chemical Corporation gain worthwhile freight savings through our specially designed cylinders which eliminate 20 to 30 lbs. of unnecessary tare weight. These containers, fully approved by ICC, carry 125 lbs. of product. Prices are available upon request.

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Eastern Sales Office: 230 Park Avenue, New York 17, New York
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Hansa Yellow 10 G—Iron Oxide, Yellow

Hansa yellow 10 G, bbls., dlvd. E. of Rockies	lb	2.45	—
Hansa G yellow, pigment, bbls	lb.	2.20	- —
Hawthorn berries, bgs.	lb	.18	.20
Heliotropin 100-lb lots, dms.	lb	2.60	3.40
Hellebore root dom. green bls	lb	.70	.75
Helonias root bls	lb	1.50	—
Hemlock oil, cns	lb	2.55	3.00
Henbane leaves, bls	lb	.40	.45
Heptachlor dms, c.l., t.l. frt alld., 100% basis	lb.	.96	—
Heptane indust. tankcars, New Jersey and New York gal.		.20	—
Houston Texas	gal	.1625	—
Hesperidin, purif., 50 kilos, f.o.b. works	kilo.	19.70	- —
Hesperidin methylchalcone, 50 kilos, f.o.b. works	kilo.	49.25	- —
Hexachlorophene dms., 1,100 lbs or more	lb	1.84	- —
dms. to 1,100 lbs	lb	1.94	- —
Hexalin (see Cyclohexanol)			
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City	lb.	.233	- —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb lots, same basis	lb.	.243	- —
bgs., smaller lots, same basis	lb.	.253	- —
fib dms., 1,000-lb lots or more, same basis	lb.	.250	- —
fib dms, smaller lots, same basis	lb.	.253	- —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½-	—
bgs., smaller lots, same basis	lb.	.43½-	.48½
Hexane, industrial, tankcars, New Jersey and New York gal.		.20	- —
Houston Texas	gal.	.16	- —
1-Hexanol, dms., c.l., works	lb.	.35	- —
dms., l.c.l., works	lb.	.35¼-	—
tanks, works	lb	.33	—
Hexyl cinnamic aldehyde, dms.	lb.	3.95	- 4.00
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½-	—
dms., l.c.l., works	lb.	.76	- —
Hexyl salicylate, dms.	lb.	1.70	- 1.75
Hexylene glycol, dms., c.l., dlvd.	lb.	.17½-	—
dms., l.c.l., dlvd.	lb.	.19	- —
tanks, dlvd.	lb.	.18	- —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00	- —
dms., smaller lots, dlvd.	lb.	14.50	- —
Homatropine hydrobromide, USP, bots. oz.		3.25	- —
Homatropine methylbromide, USP, bots. oz.		3.00	- 3.25
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton.		6.75	- —
Horehound herb, bls.	lb.	.18	- .20
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	- 1.53
100%, ret. dms., works	lb.	1.60	- 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92	- —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼-	—
dms., l.c.l., dlvd. zone 1	lb.	.29¾-	.30¼
tanks, dlvd. zone 1	lb.	.27¼-	—
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.			
Hydrobromic acid, medicinal, 48%, cbys., frt equald	lb.	.48	- .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).			
Hydrochloric acid, 18°, cnys., c.l., works 100 lbs.		2.80	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90	- 2.95
tanks, works, frt. equald ton.		28.00	- —
20°, cbys., c.l., works 100 lbs.		2.75	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.15	- —
tanks, works, frt. equald ton.		30.00	- —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs.		3.25	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65	- —
tanks, works, frt. equald ton.		35.00	- —
Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works	lb.	.15¾-	—
cbys., l.c.l., same basis	lb.	.17¼-	.17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis.	lb.	.20¾-	—
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	.95	- —
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.00	- 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works,	pint.	.70	- —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)			
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal dms., c.l., t.l., dlvd 100 lbs.		19.25	- —
55-gal. dms., l.c.l., t.l., dlvd 100 lbs		20.75	- —
20-gal. dms., c.l., t.l., dlvd 100 lbs		21.00	- —
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., l.c.l., t.l., dlvd. 100 lbs.		22.50	- —
tanks, works frt equald 100 lbs		13.40	—
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery			
Hydrofluosilicic acid, dms., works, 30% basis	lb.	.07	- —
Hydrofuramide, dms., fib. ctns., works	lb.	.30	- .40
50-lb. cyls., l.c.l., works	lb.	.55	- .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.45	- —
Hydrogen cyanide, liq., 96% tanks, works	lb.	.14	- —
Hydrogen fluoride, anhyd., cyls., dlvd. E	lb.	.30½-	.32½
cyls., dlvd W	lb.	.39	- —
tanks, works	lb.	.18	- —
Hydrogen peroxide, 35%, dms., c.l., dlvd	lb.	.202	- —
dms., l.c.l., dlvd.	lb.	.211	- —
tanks, dlvd.	lb.	.1800-	—
Hydroquinone, photo grade, dms., 50-lbs. f.o.b. works	lb.	1.10	- —
Tech., dms., c.l., dlvd.	lb.	.82½-	—
dms., l.c.l. dlvd	lb.	.84½-	—
Hydroquinone monomethyl ether, dms., t.l. dlvd	lb	2.59	- —
dms., l.t.l., dlvd.	lb	2.61	- —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago	lb.	.11	- —
tanks, Belle W Va	lb	.073	—
Hydroxycitronellal, cns.	lb.	5.70	- 6.00
Hydroxyethyl cellulose, all grades, fib. dms., 20,000-lb lots or more, f.o.b shipping point	lb.	.84	- —
fib. dms., 2,000 to 19,999-lb lots, same basis	lb.	.89	- —
fib. dms., 100 to 1,999-lb lots, same basis	lb.	.93	- —
fib. dms., smaller lots, same basis	lb	1.03	- —
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide, bots.	oz.	7.75	- 8.50
Hyoscyamine sulfate, bots.	oz.	7.75	- 8.50
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works	lb.	1.95	- —
NF, 50%, 10-cbys., same basis	lb.	1.35	- —

I

Ichthammol, NF, dms.	lb.	.75	- 1.00
Indigo (see Dyes, coaltar, 1171 indigo, syn.)			
Indole, CP bots.	lb.	13.75	-15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd.	lb	4.50	- —
Inositol, 50-lb. dms., less than 1,000 lb., dlvd	lb.	4.75	- —
10 lb. cns., 10-50 lbs. dlvd	lb	5.00	- —
5 lb. bots., dlvd.	lb	5.25	- —
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs.	lb.	1.10	- —
Resub., USP, dms., f.o.b. works.	lb.	2.20	- 2.23
Iodochlorohydroquinolin, USP, dms.	lb.	3.60	- —
Iodoform, NF dms., 300-lbs., f.o.b. works	lb	4.90	- —
dms., 100-lbs., same basis	lb	5.05	- —
a-Ionone, cns.	lb.	4.60	5.75
b-Ionone, cns.	lb.	4.15	6.15
Ipecac root, whole, bgs.	lb.	7.50	- 8.00
Powd., bbls., bxs.	lb.	9.00	- 9.50
Irish moss, bleached, prime, bls	lb.	.25	- .27
Iron blue, alkali-resisting, bbls., c.l., dlvd. E	lb.	.60	- —
bbls., l.c.l., ton lots, same basis.	lb.	.61	- —
bbls., smaller lots, same basis.	lb.	.62	- —
Dom., reg. bbls., c.l., dlvd. E	lb.	.55	- —
Iron blue, alkali-resisting, dom., reg., bbls., c.l., ton lots, same basis	lb.	.56	- —
bbls., l.c.l., smaller lots, same basis	lb.	.57	- —
Imp., British, reg., bbls. c.l., dlvd. E	lb.	.48	- —
bbls., l.c.l., ton lots, same basis	lb.	.49	- —
Iron blue, British, reg., bbls., l.c.l., smaller lots, same basis.	lb.	.50	- —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col and Nev.			
Iron compounds (see Ferric or Ferrous).			
Iron oxide, black, pure, bgs., c.l., works	lb.	.14¾-	—
bgs., l.c.l., works	lb.	.15	- —
Iron oxide, brown, pure, bgs., c.l., works	lb.	.14¼-	—
bgs., l.c.l., works	lb.	.14½-	—
Iron oxide, metallic, brown, bgs., works	lb.	.05½-	—
Iron oxide, Persian Gulf, red., bgs., c.l., works	lb.	.08¾-	—
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City	lb.	.14¼-	—
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works	lb.	.06¼-	—
bgs., l.c.l., works	lb.	.06½-	—
Iron oxide, Spanish red, bbls., c.l., ex dock	lb.	.05¾	Nom.
bbls., l.c.l., ex dock	lb.	.06	Nom.
bbls., l.c.l., ex whse, New York.	lb	.06½	Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works	lb.	.06¾-	.07
Peruvian type, bgs. l.c.l	lb	.023	.034
Iron oxide, yellow, pure, light lemon shade bgs., c.l. works	lb	.12¼-	—
other shades, same basis	lb.	.13	- .13½

Which of these 3 products and services can you use from BECCO?

What's new in Metal Treatments and Etching?

Quite a few things. For example, there's the use of Becco Ammonium Persulfate in etching printed circuits. Seems the material works a lot better — at less cost — and with none of the hazards of the ferric chloride solutions conventionally used.

Then, there's the problem of pickling copper and brass. Lots of pickling agents will do this — only trouble is, you've got to paint or plate or do whatever you're going to do with the metal rather quickly. Or else. Or else it will tarnish or oxidize and you're in the pickle all over again.

Not so with Ammonium Persulfate. Cleans fine. Puts a mild etch on the surface, too, for better paint or plating bonding. More important, perhaps, is the fact that the metal resists retarnishing for up to two weeks. Ideas?

We hope so. What's more, we've got several booklets to help spur you on. They're free—use the coupon below to order.

No. 39 and 51—Surface Treatment of Metals with Peroxygen Compounds.

No. 86 — Improving Properties of Copper and Brass Surfaces.

No. 97 — Paddle Etching of Printed Circuits with Ammonium Persulfate.

No. 99 — Tank Immersion Etching of Printed Circuits with Ammonium Persulfate.

No. 102—Etching of Printed Circuits with Mercury Activated Persulfate.

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ADDRESS_____
CITY_____
ZONE____ STATE_____

What's a PEROXYGEN?

Fact is, "peroxygen" is a word that Becco uses to indicate that we can tie oxygen onto just about anything.

How come? Well, years of experience in producing Hydrogen Peroxide has produced an affinity between Becco and oxygen — an affinity we have capitalized on to give you compounds that will provide a ready source of oxygen — wherever, however and whenever you need it.

We have a good number of such compounds on the shelves. Quite a few others are in development. Still others are merely in our minds, but we can begin drawing them out if you're interested.

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?

Becco's Four-Fold Engineering Service Program—offered free—includes:

1. Comprehensive survey of your facilities.
2. Specific proposal with recommendation of proved equipment and where it is obtainable.
3. Installation supervision by Becco.
4. Periodic inspection and permanent service.

Can you use this free Becco help, based on more years of experience with bulk handling of H_2O_2 than any other manufacturer? Use the coupon to let us know.

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Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns. lb. 1.44 - 1.80
Isobornyl acetate, cns. lb. .46 .56
Isobornyl formate, dms. lb. 1.15 - 1.20
Isobornyl propionate, dms. lb. 1.20 - 1.35
Isobutyl acetate, perfume grade, cns. lb. .30 - .35
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 - —
Isoeugenol cns. tn 3.40 4.25
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. lb. .25 - —
tanks, dlvd. E. lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., l.c.l., dlvd lb. .25¼- —
tanks, dlvd. lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - .19
dms., l.c.l., same basis lb. .19 - .20
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd. gal. .68 - —
tanks, dlvd. gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd. gal. .70 - —
tanks, dlvd. gal. .44 - —
Isopropyl alcohol, anhyd., c.l., dlvd. gal. .62 - —
dms., l.c.l., dlvd. gal. .72 - —
tanks, dlvd. gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .49½- —
bgs., l.c.l., same basis lb. .50½- —
Tech., bgs., c.l., same basis lb. .34½- —
bgs., l.c.l., same basis lb. .35½- —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .60 - —
NF, powd., bbls., bxs. lb. 70 - .75
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. 16 - .17
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin NF, powd., fib. dms. lb. .10 - .12
NF colloidal 50-lb. bgs. lb. .15½- .17½
Karaya gum No 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .13

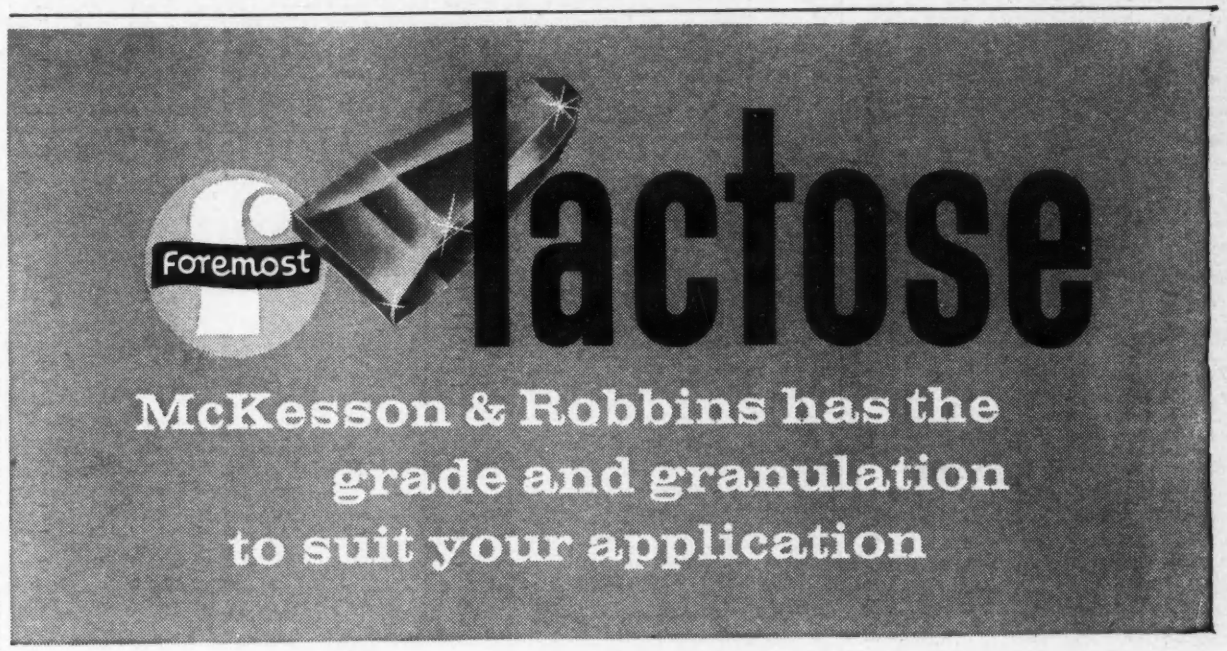
L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls, dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald, lb. .2085- —
bbls., dms., 1 to 4, frt. equald, lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt equald lb .3385- —
Lactic acid edible, 80% bbls., dms., 5 to 19, frt. equald lb .3435- —
bbls. dms. 1 to 4, frt equald, lb .3485- —
Plastic grade, 50%, c.l., bbls., works lb .2740- —
bbls., 20 or more, works lb .2790- —
bbls. 5 to 19, works lb .2840- —
bbls., 1 to 4, works lb .2890- —
80%, bbls., c.l., works lb .4625- —
bbls. 5 to 19, works lb 4725- —
bbls 1 to 4, works lb 4775- —
Lactic acid, tech., 44%, bbls., c.l., works 100 lbs. 12.45 - —
bbls., c.l., works 100 lbs. 12.85 - —
USP 85% phys lb 85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb .14 - —
bgs., 6,000-lb lots, frt equald lb 14½- —
bgs., 2,000 lb lots frt equald lb 14¾- —
bgs., 200 lb lots, frt equald lb 15¼- —
Edible lactose in fib. dms., ½c. higher.

Lactose, ferment, grade, bgs., c.l., works lb. .08¾- —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,000-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald lb. .19 19¾
Lady's slipper root, bls. lb. 3.00 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, anhyd., cosmetic, 400-lb. dms., works lb. .26 .30
USP, hydrous, 400-lb dms., works. lb. .20 —
Lard, cash, dms., Chicago lb. .1180- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 —
Laurel leaf oil, dms., cns. lb. 9.75 -12.50
Laurent's acid, bbls lb. .70 —
Laurie acid, pure, dms. lb. .30¼- .32¾
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots lb. 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms. t.t., works lb. 66 —
Lavandin oil, 22-24%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 .60
Ord., bls. lb. .20 .25
Select., bls. lb. .90 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 4.00
40-42% ester, cns. lb. 5.00 7.75
Spike, Spanish, cns. lb. 1.75 - 2.00

Lead acetate, NF, cryst., gran., powd., bbls lb. .24½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd. bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity frt. alld on $150 or more lb. .30½- —
1-lb bgs. same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms lb. .52 - —
Lead iodide, NF, V jars lb 3.62 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal, prime, pigs, New York lb. .11 - —
St. Louis lb. .1060- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb. dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms., dlvd. lb .31¾- —
Lead nitrate, bbls lb .34¼ .36¾
Lead orthosilicate gel., 50-60% PbO, dms. works lb. .29¼ .34¼
Lead peroxide, tech powd. bbls lb. .45 - .50
Lead phthalate dibasic, dms. works. lb. .41 - —

Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 98% Pb^2O^4, bbls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate, precip., 23%Pb. dms., lb. .49 - —
Lead salicylate, normal dms., works lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17½- —
24% Pb, dms lb. .21½- —
Solid, 30% Pb, dms lb. .26¾- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
basic silicate bgs. c.l., shipt. pt. frt. alld lb. .16½- —
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lecithin, edible, tech. bleached, non-ret. dms., c.l., works, lb. .14 .15
non-ret. dms., l.c.l., same basis lb. .15 .16



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Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo.14.20 - —
Lemon oil, USP, Calif., cns., dms. lb. 1.25 - 1.50
Messina cns. lb 3.25 - 4.00
Lemongrass oil, cns., dms. lb. 2.45 - 2.50
di-Leucine, dms., 1 kilo, works kilo.50.00 - —
Licorice root gran., bls. lb 13 - —
Powd., bls. lb 15 - .16
Whole bls. lb .09 - .10
Lignaloe wood oil, Mexican, cns lb. 2.75 3.50
Lignosultonate (see under Ammonium or Sodium lignin sultonate)
Lilac oil lb. 1.500.00
Lime chemical (quicklime), bulk, c.l. 50.000 lbs. works, E ton.14.25 - —
Chemical hydrated, bgs., c.l., same basis ton.17.25 - —
spray, bgs. c.l. same basis ton.18.25 —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican, dms lb. 5.00 - 5.60
West Indian, dms lb. 5.00 - 5.60
Expressed, West Indian, dms lb. 6.50 - 7.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil dms lb 2.45 4.25
Syn. 98-100% dms., works lb 2.40 3.75
Linalyl acetate ex bois de rose 90-92% dms lb 2.65 4.50
96-98% dms lb 3.25 —
Syn., 98-100% dms. works lb. 2.75 - —
Lindane, 25% formulation, to distributors dms. frt alld lb. 1.35 1.50
Lindane, tech. to formulators, 250-lb dms. 5,000 lbs. dlvd. lb 2.13 - —
100-lb dms. 5,000-lbs. dlvd. lb 2.15 - —
250-lb dms. less than 5,000-lbs. dlvd lb 2.18 - —
100-lb dms. less than 5,000-lbs. dlvd lb 2.20 —
Linden flowers, with leaves bls lb 35 .40
Without leaves bls lb 42 .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton.61.50 - —
Extracted 34% bulk, same basis, ton.56.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1620-
dms., l.c.l., New York lb. .1710- .1760
tanks, f.o.b. Minneapolis lb. .1260- —
tanks, New York lb. .1372- —
tankwagon, New York lb. .1432- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid dist., dms lb. .1980- —
Water white, dms. lb. .2280- —
Litharge comi., powd. bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum hydride, lump, dms., works lb.33.00 39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt equald lb 2.60 —
Lithium carbonate, NF, dm ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride CP, annyd., dms., ton lots lb. 1.23½- —
Tech. anhyd. dms., c.l., t.l., dlvd. or works frt alld lb. .87 —
dms. l.c.l. same basis lb .88 .92
Lithium citrate NF dms. ton lots, lb 1.50 —
Lithium fluoride dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd. dms., 500-lbs lots or more works, lb 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .60 - —
dms., l.c.l., frt. alld lb. .64 - —
Lithium manganite, dms. works lb. .95 1.05
Lithium nitrate, tech. dms., 100-lb lots lb 1.15 1.25
Lithium salicylate dms. lb 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate dms. c.l., works, lb. 47½ —
dms. ton lots works lb. 48½- —
dms., less ton lots, works lb. 53½- —
Lithium sulfate dms. 100-lb. lots, lb 1.15 1.25
Lithium titanate dms., works lb. 1.15 1.25
Lithol red toner barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone ord. bgs. c.l., dlvd E. lb. .08¾- —
bgs., l.c.l., dlvd E lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 —
bgs. l.c.l. dlvd lb. .12 —
Lobelia herb, bls lb. .95 1.10
Lobeline sulfate, bots., 50-oz. lots, works oz.30.00 —
Locust bean gum powd., bgs. lb. .35 .40
Lycododium, cs. lb 2.50 3.00
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 —

M

Mace, Siauw, No. 1, bls. lb. 1.58 - —
No. 2, whole, bls. lb 1.40 - —
siftings, bls lb 1.35 —
Mace oil, dist., cns., dms lb 9.00 - 11.00
Magnesia, calcined, tech, bgs., cns., frt equald lb. .25¾ .26½
Tech. syn. rubber grade, light, bgs., c.l., frt. equald lb .28¾ .30
rubber grade, extra light, bgs., c.l., frt equald lb .28 —
bgs. l.c.l., frt equald lb .28¾ —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs. c.l. f.o.b. Lunning, Nev ton 39.50 - —
91% bgs., c.l., same basis ton 49.50 - —
95% bgs., c.l. same basis ton 59.00 - —
USP light, bgs. lb .36½- .37½
USP, heavy, bgs lb .36½- .37½

Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton.46.00 - —
Magnesium bromide, 50-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt equald lb. .14 —
bgs., l.c.l., frt equald lb. .15 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works lb. .12¾- —
dms., l.c.l., works lb .14 .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton.60.00 —
bgs., l.c.l., works ton.75.00 -100.00
Magnesium gluconate 100-lb dm., f.o.b. works, E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- 25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.l.l., frt alld lb. .23½- —
tanks, frt alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt alld on carlots lb. .50 - —
Magnesium nitrate, cryst., dms., works lb. 29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 —
bgs. l.c.l., works 100 lbs 2.90 3.15
USP, cryst., bgs. c.l., works, 100 lbs. 2.35 - —
bgs. l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib dms., 5,000-lb lots lb .38 - —
fib dms., 1,000-lb lots lb .40 - —
fib dms., 100-lb lots lb .45 - —
Bulky and super grades of magnesium trisilicate 7c per lb. higher.
Malachite green, straight, PTA, bbls., works lb 5.30 - —
Malathion, dms., c.l., works lb .89 —
dms., l.c.l., works lb .92 1.01
Maleic acid, cryst., powd. dms lb. .37¼- —
Maleic anhydride, dms c.l. frt equald lb. .24 —
dms., l.c.l., frt. equald lb. .25½- —
tanks frt equald lb .22½ —
Maleic anhydride in bags ½c per lb less.
Malic acid, tech., dms lb. .50 —
Mandelic acid, NF, dms., 1,000-lb lots lb 2.35 —
dms., smaller lots lb 2.40 2.50
Mandrake root, bls lb. .45 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb 35 - —
Manganese hypophosphite, NF dms. lb. 3.52 —
Manganese linoleate, liq. 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 - —
Manganese naphthenate, liq., 6% Mn, dms., frt alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb .29¼- —
Precip., 6½-7% Mn, dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S., E ton.86.50 - —
bgs. l.c.l. dlvd S., E ton.93.50 - —
Manganese tallate 6% dms lb .26½ —
Manila copal gum, C, bgs lb. .35 .39
DBB bgs lb. .25 .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 .24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 —
fib dms., to ton lots, works lb. .62 —
fib dms., single dm., works lb. .65 —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 —
Menadione, USP bots. gram. .044 .05
Menhaden oil, crude, tanks, works, Atlantic ports lb. .06¼- —
Menthol, nat. USP, Brazilian, large cr. cs lb. 8.40 - —
Nat., USP, Brazilian, regular crystals, cs lb. 8.25 - —
Japanese cs. lb.10.50 12.00
Syn., USP, racemic, 25-lb lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib, dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —

Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran. or powd., 50-lb dm., 100 lbs., f.o.b. works lb. 3.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 6.97 - —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs. f.o.b works, lb. 4.72 - —
tech., 50-lb dm. 100 lbs., same basis lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm. 100 lbs., same basis, lb 4.89 - —
tech., dms. 100 lbs lb 4.35 - —
25-lb fib dm lb. 4.38 - —
Mercurous chloride (see Calomel)
Mercurous iodide yellow, NF, 100-lb. dm f.o.b works lb. 8.22 - —
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal 76 lbs per flask, net-flask.209.00 212.00
Mesityl oxide dms., c.l., dlvd lb .15 —
dms. l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid dms, works lb .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98% dms. truckloads frt equald lb .42½- —
dms. smaller lots, frt equald. lb. .43 - .75
tanks works frt equald lb. .40 - —
Methanol, nat, denaturing grade, tanks frt alld gal. .85 —
Syn. zone 1, dms., c.l., or t.l. min. dlvd gal. .51½- —
dms. t.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b terminal gal. .29 - —
Methanol, syn., zone 2, dms. c.l., or t.l., min frt alld or dlvd. gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal .34 —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt equald lb.27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue (calcium salt) 90% min., dms. t.l. frt alld lb 1.10 - —
dms., t.t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt alld., 50-lb or more lb 3.50 - —
Feed grade, 98% fib dms same basis lb. 1.43 - —
Methoxychlor 50% wettable powder, dealers, dms., cs lb. .86 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., t.c.l., same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret dms., t.c.l., same basis, lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal. .62½- —
Methyl acetone syn. dms. c.l. frt. alld E gal. .66 - —
Methyl acetone, syn., dms., l.c.l., frt. alld. E gal. .76 - —
tanks frt alld E gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., l.t.l., dlvd lb. .36¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., l.c.l., same basis lb. 2.00 - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.25 2.45
Methyl benzoate, cns. dms lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb lots and more, same basis lb. .76 - —
50-lb bgs., smaller lots, frt. alld. lb.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. 57½ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —

a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works, lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 —
Methyl heptin carbonate, bots lb.27.75 31.00
Methyl p-hydroxybenzoate, fib dms lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 —
dms., t.c.l., dlvd. lb. .20½- —
tanks, dlvd lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol)
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 —
dms., t.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt equald. with Belle, W Va lb. .31 —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 —
Methyl naphthyl ketone, cryst., cns lb. 2.45 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt alld E lb. .84 - —
Methyl parathion prices 2c per lb higher in West
Methyl roseaniline chloride, NF., 5-lb fib dms lb 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼ —
dms., t.c.l., same basis lb. .62½ 67½
Methyl testosterone, USP, 100-gram lots gram No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 - —
5-39 dm lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA bbls., dlvd. E of Rockies lb. 2.95 - —
Tungstated, PTMA, bbls., same basis lb 4.35 —
Methyl violet prices 1c higher W of Rockies
Methylene blue, fib, dms. 100-lb. lots, frt. adjusted lb. 4.67 - —
Methylene chloride tech., straight or assorted dms. c.l. or t.l., dlvd lb. .12½- —
dms. t.c.l. t.t.l. dlvd lb. .15¾ —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32° t.... m.p., dms. works lb 90 —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd. paint, plastic, 100 mesh, bgs. c.l., works lb .04 —
roofing, 20 to 80 mesh, works lb. .03 —
wet-grd., biotite, bgs. c.l., works, frt alld.E lb. .06½- —
bgs. l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt alld E. lb. .08¼- —
bgs. l.c.l., ex-whse or freight alld E lb. .09 —
Mica, wet-grd., rubber, bgs., c.l., works, frt alld E lb. .08 —
bgs. l.c.l. ex-whse. or frt. alld E lb. .08¾- —
wallpaper, bgs., c.l. works, frt. alld E lb. .08¾- —
bgs. ex-whse or frt alld E. lb. .09 —
white, 5-10 microns, bgs., c.l., works frt alld E lb .08¼ —
Mica, wet-grd W of Miss ½c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 .11
laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white tech., 50-65 vis., non-ret dms., c.l., f.o.b. refy gal. .63 - —
50-65 vis. non-ret dms., t.c.l., basis gal. .70 - —
tankscars, refy gal. .49 - —
Mineral oil, white tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret dms., t.c.l. same basis gal. .70 - —
tankcars, refy gal. .49 - —
NF, 80-90% vis. non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms. t.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret dms., t.c.l., same basis gal. .77 - —
tankcars, rfy gal. .56 - —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., t.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ - —
non-ret. dms., t.c.l. same basis gal. .85½- —
tankcars, refy gal. .64½- —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½- —
non-ret. dms. t.c.l. gal. .87½- —
tankcars, refy gal. .66½- —
Mineral oil, white, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½- —
non-ret. dms., t.c.l. gal 92½- —
tankcars, refy gal 71½ —
(For f.o.b N. Y. add 2c for tankcars; 2c. for c.l. and 3c for t.c.l non-ret dms.).
Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., t.c.l., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 —
New York gal. .305 —
Houston, Texas gal. .25 —
regular, tankcars, New Jersey and New York gal. .18 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 —
Mineral spirits, 140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner kgs., c.l., works lb. 6.30 —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .13 - .13¼
tanks, New York gal. .15 - .16
Molybdated orange, bbls lb 49 —
Molybdenum metal, powd., 80 or 200 mesh, cns., works kilo 7.84 - —
325 mesh, cns., works kilo 9.13 - —

Molybdenum trioxide, purif., dms., works	lb.	1.18	—
Tech., chemical, dms., works, basis Mo content	lb.	1.48	—
Tech., metallurgical, dms., works, basis Mo. content	lb.	1.47	—
Molybdic acid, 85%, dms., works	lb.	1.03	1.13
Monoallylamine, dms., c.l., dlvd	lb.	.965	—
dms., c.l., dlvd.		.995	—
tanks, dlvd.	lb.	.96	—
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½	—
dms., t.c.l., same basis	lb.	.59	—
tanks, same basis	lb.	.55	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55	—
dms., t.c.l., works	lb.	.56	—
tanks, works	lb.	.54	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10½	—
dms., t.c.l., same basis	lb.	.11½	—
tanks, same basis	lb.	.08¾	—
Monochlorobenzene prices in the West higher.			1¾c.
Monoethanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).			
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis	lb.	.38½	—
dms., t.c.l., dlvd. E., 100% basis	lb.	.40	—
tanks, dlvd. E., 100% basis	lb.	.35	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½	—
dms., t.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
Monomethylamine, anhyd., cyls., t.c.l., frt. equald., 100% basis	lb.	.30	—
tanks, 100% basis	lb.	.26	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36	—
Monomethylamine, 30-35% soln., dms., t.c.l., frt equaid, 100% basis	lb.	.36½	—
tanks, frt. equald., 100% basis.	lb.	.28	—
40% soln., dms., frt. equaid., 100% basis	lb.	.33	—
dms., t.c.l., frt. equaid., 100% basis	lb.	.33½	—
tanks, frt. equaid, 100% basis.	lb.	.26	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31	—
bgs., t.c.l., dlvd. E	lb.	.32	—
Monopotassium glutamate, dms., 1,000-lb lots, frt alld	lb.	3.05	—
dms., 100-lb lots, same basis	lb.	3.25	—
Monosodium glutamate, dms., dlvd.	lb.	1.07	1.13
Monosodium phosphate (see sodium phosphate, monobasic).			
Montan wax, Calif., refd., bgs	lb.	.27	.28
Imp., crude, Bohemian, bgs	lb.	.25	.26
German, bgs	lb.	.25	.26
Morphine, cns., 100-oz., f.o.b. works	oz.	12.35	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine sulfate, USP, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., t.c.l., dlvd. E	lb.	.56¾	—
tanks, dlvd E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib. dms., 100-lb lots	lb.	4.40	4.90
cns., 25-lb lots	lb.	4.50	5.00
Ketone fib. dms., 100-lb. lots	lb.	4.60	5.10
cns., 25-lb. lots	lb.	4.70	5.20
Xylol, fib. dms., 100-lb. lots	lb.	1.26	—
cns., 25-lb lots	lb.	1.40	—
Mustard seed, Danish, yellow, bgs.	lb.	.12	—
Montana, yellow, bgs	lb.	.10½	—
Oriental, bgs	lb.	.08	—
Mustard, oil, syn., bots	lb.	1.60	1.85
Myristic acid, bgs	lb.	.23¼	.25¼
tanks	lb.	.22¼	—
Myrrh gum, cs	lb.	.65	.75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York	gal.	.19	—
Group 3	gal.	.13875	—
Houston, Texas	gal.	.155	—
Naphthalene, crude, dom., 78°, tanks, frt. equald	lb.	.06¼	.07
imp., 78°, bgs., large lots	lb.	.09½	Nom.
Refd., indust., chipped, crushed, bgs., frt. equald	lb.	.13½	—
tanks, same basis	lb.	.10¾	—
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15¼	—
cs., 50 lbs., c.l., same basis.	lb.	.15¾	—
1-lb pkgs., c.l., same basis.	lb.	.18½	—
a-Naphthol, dms., frt. alld	lb.	1.02	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.34	—
bbls., t.c.l., works	lb.	.36	—
Naphthol ITR red toner, bbls., works	lb.	5.00	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)			
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)			
1-Naphthol-5-sulfonic acid (see L acid)			
1-Naphthol-5-sulfonic 8-amino acid (see S acid)			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid)			
a-Naphthylamine, dms., frt. alld	lb.	.53	—
b-Naphthylamine tech. flake, bbls., works	lb.	1.60	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid)			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)			
2-Naphthylamine-7-sulfonic acid (see F acid)			
Naringin, fib. dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen, USP, dms., frt, adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.25	—
fib. dms., 100-999-gram lots, basis activity	gram.	.30	—
Tech., fib. dms.	gram.	.13½	—
Neopentylglycol, dms., c.l., dlvd	lb.	.32	—
dms., t.c.l., same basis	lb.	.33	—
Nerol, dms.	lb.	4.75	—
Neroli oil, NF, French, bots	lb.	425.00	575.00
Tunisian, bots.	lb.	400.00	—
Nerolin, cns.	lb.	2.45	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.40	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd.	lb.	.68½	.75½
Nickel carbonate bbls., dlvd	lb.	78¼	.85¼
Nickel chloride, bbls., dlvd	lb.	.37	.45
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal, electro cathodes, cs., works	lb	.74	—
Nickel nitrate, dms., frt. alld	lb.	.31½	.33½
Nickel oxide, black, bbls.	lb.	.85	—
Green, bbls.	lb.	.84	—
Nickel sulfate, bgs., c.l., dlvd	lb.	.28	—
bgs., t.c.l., dlvd.	lb.	.28½	.36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd	kilo.	5.75	6.50
dms., less than 100 kilos, dlvd.	kilo.	6.25	7.00
Nicotinamide hydrochloride, 50-kilo dms., dlvd.	kilo.	6.50	7.50
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt. alld	lb.	1.05	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.10¼	—
Nikethamide, cbys.	lb.	5.00	—
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs.		5.75	—
cbys., t.c.l., works E 100 lbs.		6.05	6.85
38° Be., cbys., c.l., works E. 100 lbs.		6.25	—
cbys., t.c.l., works E 100 lbs.		6.55	7.35
40° Be., cbys., c.l., works E. 100 lbs.		6.75	—
cbys., t.c.l., works E 100 lbs.		7.05	7.85
42° Be., cbys., c.l., works E. 100 lbs.		7.25	—
cbys., t.c.l., works E 100 lbs.		7.55	8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs.		3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs.		4.90	—
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works	lb.	.18¼	—
cbys. extra, t.c.l. works.	lb.	.20	—
5-pint bots., extra, cs., c.l., same basis	lb.	.22½	—
5-pint bots., extra, cs., t.c.l., same basis	lb.	.24	.25
dms., frt alld	lb.	.99	—
4-Nitro-2-aminophenol, tech., paste, dms., t.c.l., works	lb.	.64	—
m-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms., frt. alld., 100% basis.		1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld	lb.	.49	—
dms., t.t.l., frt. alld.	lb.	.51	—
o-Nitroaniline orange toner, kgs.	lb.	1.50	—
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd	lb.	.44¼	—
dms., t.c.l., same basis	lb	46½	—
o-Nitroanisole tech. tanks frt alld.	lb	.36	—
p-Nitroanisole, tech. solid, dms., frt alld	lb	.72	—
Nitrobenzene, dbl dist, dms., c.l., frt alld	lb	.13	—
dms., t.c.l., frt. allid	lb	.14	—
tanks, frt. allid	lb	.11	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works	lb.	.37½	—
bbls., t.c.l., same basis	lb.	.33½	.40½
18-20, cps., bbls., c.l., same basis	lb	.39½	—
bbls., t.c.l., same basis	lb.	.40½	.42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis	lb.	.43	.46
Nitrocellulose, spirit soluble, 30-35 cps. ¼, ½ seconds, bbls., c.l., same basis	lb.	.43	—
bbls., t.c.l., same basis	lb	.44	.46
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.42	—
bbls., t.c.l., same basis	lb	.43	.45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms. c.l., frt. allid	lb.	.15	—
dms., t.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—

why chemical companies are taking a closer look at

DELHI-TAYLOR

Chemical companies are taking a closer look at Delhi-Taylor as a source for their raw materials. The reason? Flexibility and dependability of Delhi service. Here are just a few examples:

- Delhi can move quickly into production on new petrochemicals. Our recent Orthoxylene plant, engineered by our own staff, was in production in 6 short months.
- Our selected feed stocks and diversified petroleum streams offer an unlimited source of chemicals.
- The location of our plants on the Inland and Coastal Waterways with multiple docking facilities means low cost, fast deliveries.
- Strategically located petrochemical terminals add to our delivery advantages.
- Rigid quality control and testing procedures assure highest purity products.
- Our experienced technical service department can assist you in planning your products.

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CORPUS CHRISTI • CHICAGO • CHARLESTON, S. C. • BATON ROUGE • HOUSTON

p-Nitrochlorobenzene dms. .... lb .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb .88 — —
Nitroethane, dms. c.l. dlvd. E lb .25 — —
dms., t.c.l., dlvd E .... lb 26½ — —
tanks, dlvd E .... lb 22½ — —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls. t.l., min 5 tons, same basis lb. .07½ - —
Cyls., l.c.l., t.l.l. same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge bulk, f.o.b. Chicago works unit-ton 3.80 - —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane dms t.l., dlvd. E lb 25 — —
dms. t.l.l. dlvd E .... lb 26½ — —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene bbls. frt. alld. lb 31 - —
o-Nitrophenol, dms., works, frt. equald lb .94 - —
p-Nitrophenol, dms. c.l. frt. alld. lb 45 - —
dms. t.c.l. frt alld lb 47 - —
1-Nitropropane dms. c.l. frt alld E of Rockies lb 22½ - —
dms. t.c.l. same basis lb .25 - —
tanks same basis lb 21 - —
2-Nitropropane dms. c.l. frt. alld. E of Rockies lb .18½ - —
dms. t.c.l. same basis lb .20 - —
tanks same basis lb .16 - —
Nitropropane prices West of Rockies are 1c per lb higher
m-Nitrotoluene tech. dms. frt. alld. lb .50 - —
o-Nitrotoluene dms. c.l., frt. alld lb .15 - —
dms. t.c.l. frt alld lb 16 - —
tanks frt alld lb 13 - —
p-Nitrotoluene tech., cast, dms., c.l., works lb. 27½ - —
dms. t.c.l. works lb .28 - —
flake, dms., c.l., t.l. works lb 27½ - —
dms. t.c.l. works lb .28 - —
m-Nitro-p-toluidine dms. lb 1.25 - —
Nonylphenol dms. c.l. frt. alld lb .22½ - —
dms., t.c.l. frt. alld lb. .23½ - —
tanks, frt. alld lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c higher
Nutmegs East Indian whole bgs. lb. 1.40 - —
West Indian bgs. lb. 1.26 1.28
Nutmeg oil USP dist., East Indian, cns lb 9.00 12.00
West Indian cns. lb 9.00 12.00
Nux vomica, bls lb .20 — —
Pewd. bbls. bxs. lb .30 .32

O

Ocher (see Iron oxide, yellow, nat.).
Ocotea cymbarum oil, dms lb .46 - .48
Octane, indust. tanks, Bayonne, N.J gal. .20 - —
1-Octanol, tech., dms, c.l., dlvd., Zone 1 lb 43½ - —
dms., t.c.l., dlvd. Zone 1—lb. 45½ - —
tanks, dlvd., Zone 1 lb. 41 - —
Octyl alcohol, perfumers grade, bots. lb 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
tert-Octylamine dms. c.l., t.l., f.o.b. works lb .34½ - —
dms t.c.l. same basis lb .35 - —
Octylphenol, bgs. c.l., works lb .22½ - —
bgs., l.c.l., works lb .23 - —
tanks, works lb .21½ - —
Octylphenol in dms., 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .15¼ - .15¾
tanks lb. .13¾ - .14
Oleic acid, dbl.-dist. (white), dms. lb. .17½ - .20
tanks lb. .15 - —
S. D., dms. lb. .16½ - .19
tanks lb. .14 - —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Fears, cs lb 22 .30
Olibanum oil, bots lb 5.00 7.65
Extra fine, bots lb 8.00 9.50
Olive oil, edible, dms., spot, duty paid gal. 2.30 - 2.40
Olivine, crude, works ton 12.00 - —
20 mesh, works ton 15.00 - —
100 mesh works ton 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs. same basis, oz. 21.65 - —
powd., cns. 50 lbs. same basis, oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb .70 - .90
Calif., sweet., cns. dms lb. .60 - —
Florida, cns., dms lb. .40 - .45
Messina, cns. lb 3.25 5.00
West Indian bitter, cns., dms. lb. 3.50 3.50
Orange peel, bitter, Haitian, bls lb .18 .20
Sweet lb .28 .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns .... lb 1.80 2.30
Orris root, Florentine, bls lb 55 — —
powd., bbls. bxs lb 65 — —
Verona, bls lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Pheretidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram 3.00 4.00
Ouricury wax, crude, bgs lb. .53 - .55
Refd., pure, bgs lb. .58 - .60
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½ - —
Oxalic acid in drums is priced ½c. per lb higher.
6-Oxynaphthoic acid pigment manufacture, dms., frt alld lb. .913 - —
Dyestuff manufacture, dms., same basis lb 1.03 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.93 5.17

P

Palm oil, clarif., dms lb. .1400- .1500
tanks lb. .11¼ - —
Palm oil acid, double dist., dms. lb. .15¼ - .17¾
single dist., dms lb .14¾ - .17¼
tanks lb. .12¼ - —
Palmarosa oil, cns lb. 4.90 6.00
Papain, powd. bots. lb 5.50 10.00
Papaverine hydrochloride, nat. or syn. USP cns., 25-oz to 100-oz. lots oz 5.00 - —
cns., smaller lots oz 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 7.35
Paprika, Bulgarian, bgs. lb .27 - —
Hungarian, bgs lb .20 - —
Spanish, bgs. lb .30 - —
Yugoslavian, bgs. lb. .31 - .37
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Anisidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
Paraffin, fully refd., 132°-134°F., ASTM, tanks, refy lb. .0765- —
133°-137°F., ASTM, tanks, refy lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt alld lb. .10 - —
bgs., t.c.l., frt alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., t.c.l., ex whse lb. .1865- —
USP-X, fib dms., c.l lb. .19 - —
fib dms, 1,000-lb lots lb. .20 - —
fib dms., smaller lots lb. .21½ - —
Paraldehyde tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 - —
55-gal. dms., l.c.l., dlvd. E lb. .15½ - —
tanks, dlvd. E lb. .11½ - —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl, dms. frt alld lb. .84 —
Parathion prices 2c. per lb higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls lb 35 40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E at Rockies lb 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b., mills ton 55.00 -55.50
solvent, same basis ton 52.00 -52.50
Peanut oil crude, tanks, f.o.b mills lb. .13¾ - —
Refd., dms. lb. .19 - .19¼
tanks lb. .17 - —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt kilo 4.52 - —
Pelargonic acid, dms., c.l., dlvd lb .25 - —
ton lots, same basis lb. .27½ - —
tanks, same basis lb. .23½ - —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .018 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil USP imported, cns. lb 1.95 2.70
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½ - —
Pentachlorophenol in dms 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs. t.c.l., dlvd lb .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust. tanks, Tex refy. gal. .14 - —
Pentobarbital, dms. 100 lbs. or more lb. 6.00 —

Pepper, black, Malabar, bgs. .... lb. .48 - —
Lampong, bgs. .... lb. .48 - —
Red, Muntuas, bgs. .... lb. .33 - —
Japanese, Hontoka, bgs. .... lb. .37½ - —
Santaka, bgs. .... lb. .31½ - —
Sudanese, bgs. .... lb. .36 - —
White, Muntok, bgs .... lb. .74 - —
Peppermint leaves, dom., USP, bls., dms lb. No stocks.
imp., USP, dms. .... lb. .85 - .90
Peppermint oil, nat., dms .... lb. 4.90 - 5.25
Redist., USP, dms .... lb. 5.50 - —
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½ - —
dms., t.c.l., dlvd. .... lb. .15¼ - —
tanks, dlvd. .... lb. .11¾ - —
tanktruck, 1,000 gal. min. dlvd lb .12¼ - —
Peri acid, dry bbls., frt. alld lb. 1.60 — —
Paste, bbls. frt. alld .... lb. 1.55 - —
Peru balsam, dms .... lb. 1.15 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.30 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., t.c.l., dlvd. .... lb. .10125-.11375
tanks, refy. .... lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., t.c.l., dlvd. .... lb. .09125-.10375
tanks, refy. .... lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., t.c.l., dlvd. .... lb. .10625- .12
tanks, refy. .... lb. .06735- —
Petrolatum, USP, snow white, dms., c.l., refy lb. .09125- —
dms., t.c.l., dlvd lb .11125- .125
tanks, refy. .... lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb .07125- —
dms., t.c.l., dlvd. lb. .095 - .10375
tanks, refy lb .04875- —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½ - .18¾
non-ret. dms., t.c.l., works lb. .17½ - .19
tanks, works lb. .14½ - .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine dms., c.l., frt. alld. E lb 91 - —
dms., t.c.l., same basis lb .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms. same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret dms., frt. alld. E of Rockies lb. .17¾ - —
non-ret dms. t.c.l., same basis. lb. .18¾ - —
tanks, same basis lb. .15¾ - —
Phenol, 82-84% (cresol 16-18%) non-ret. dms., c.l., same basis. lb. .17½ - —
non-ret dms., t.c.l., same basis. lb. .18½ - —
tanks, same basis lb. .15½ - —
Phenol, 39°C., or above, tar dist., non-ret. dms., c.l., same basis. lb. .19 - —
39°C., or above, tar dist., non-ret. dms., t.c.l. lb. .20 - —
tanks, same basis lb. .17 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .19½ - —
dms., t.c.l., same basis lb. .21½ - —
tanks, same basis lb. .17½ - —
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb 1.35 - —
Phenothiazine drench, fib dms., t.l., dlvd lb. .46 - —
fib. dms., ton lots, dlvd lb. .49 - —
NF, fib. dms., t.l., dlvd lb. .45 - —
fib. dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms., 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.15 - 2.35
100%, bots. .... lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst., cns lb. 1.25 1.75
di-Phenylalanine, dms., 1-kilo kilo. 65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .50 - —
dms., t.c.l., dlvd. E .... lb. .51½ - —
tanks, dlvd. E .... lb. .47½ - —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
t.c.l., t.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib, dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. 75½ - —
dms., t.c.l., same basis lb. .76½ - —
Phenylethyl acetate, bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 —
dms. smaller lots, frt alld lb 1.70 1.85
Phenylethylphenyl acetate, bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb dms. lb 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E. lb 1.80 - —
fib dms., smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., t.c.l. works. lb. .48 .50
p-Phenylphenol, bgs., c.l., works lb. .38½ - —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾ .26
nubs, bgs. .... lb. .33¼ .37
seeds, bgs. .... lb. .20 Nom.
sorts, bgs. .... lb. .20 .24
Phloroglucinol, comi., fib dms., works lb 6.40 - —
CP, bots., works lb. 17 75 - —
Tech., fib dms. works lb. 10.45 - —
Phloxin red toner (see Eosin red toner)
Phosgene, ret. cyls. works lb 15½ - —
Phosphate defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, short-ton. 4.989 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 6.438
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 74-75%, b.p.l., bulk, c.l., same basis, short ton. 7.399 - 7.236
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.236
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., t.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80% cbys., c.l., frt equald 100 lbs. 7.85 - —
cbys., t.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., t.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .53 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .30 - .30½
dms., t.c.l., works, frt. equald lb. .21½ - —
tanks, works, frt equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½ - —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½ - —
dms. t.c.l. works lb. .14½ - .15½
Solid, dms., c.l. works lb. .11½ - —
dms., t.c.l., works lb. .12½ - .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., t.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., c.l., works lb. .28 - —
dms., t.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .20 - —
bgs., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19½ - —
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls. dlvd E of Rockies, lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb 3.00 - —
Water dispersable, bbls. .... lb 1.71 — —
Phthalocyanine green prices 1c higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms. c.l., works, frt. equald lb. .46 - .48
dms., t.c.l., works, frt. equald lb. .46½ - .49
tanks, same basis lb. .43 - .46
b-Picoline, 98% dms., t.l., works. lb. 1.05 - —
dms., t.c.l. same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½ - —
dms., t.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb. 1.60 - —
tanks, t.l. same basis lb. 1.50 - —
Picric acid, NF bbls. lb. .85 - —
Tech., bbls lb. .44 - —
Pigment green B, kgs lb. 1.55 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials. oz. 4.65 - 5.15
Pimento, Jamaican, bgs lb. .8¾ - —
Mexican, bgs. .... lb. .56 - —
Pimento berry oil, NF, dms. .... lb. 3.75 - 9.25
Pimento leaf oil, crude, cns .... lb. 2.50 - 2.60
Pine oil, dest.-dist., dms., t.c.l. works lb. .15 - —
dms., t.c.l. ex whse. New York. lb. .173 - —
Steam-dist. dms., ex whse., New York lb. .185 - —
dms., dlvd. .... lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. .... lb. 2.25 - —
Piperazine anhyd., dms., c.l., frt. alld. E lb. 1.80 - —
dms., t.c.l., frt. alld. E .... lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., 5 dms. or more, t.c.l., t.t.l., f.o.b. works lb. 2.65 - —
1-4 dms., same basis lb. 2.70 - —
dms., c.l., t.l., frt. equald lb. 2.55 - —
Piperonyl butoxide, dms., dlvd. E lb. 4.50 5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works .... oz. 81.00 -85.00
Pleurisy root, bls. .... lb. .45 .50
Podophyllum resin, NF, dms. .... lb. 12.50 -15.50
Poke root, bls. .... lb. .19 .22
Polymyxin, bots., bulk.. 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units, 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works, lb. .44 - —
dms. smaller lots, works lb. .47 - .48
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs. lb. 23½ - .26
Nubs, bgs. .... lb. .36 - .44
Poppy seed, Argentine, bgs. .... lb No stocks.
Dutch, bgs. .... lb. .16 - —
Danish, bgs. .... lb. .15 - —
Polish, bgs. .... lb. .16 - —
Turkish, bgs. .... lb. .13 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., t.c.l., same basis 100 lbs 5.25 - —
tanks, same basis 100 lbs 3.70 - —
reg., flake, 88-92% dms. c.l., same basis 100 lbs. 9.55 - —

Potash, red., flake, 95-62%, dms., l.c.l., same basis..100 lbs.11.05 • —
solid, 80-62%, dms., c.l., works, 100 lbs. 9.10 • —
dms., l.c.l., works.....100 lbs.10.00 • —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E..lb. .31 • —
Potassium bicarbonate, USP, gran., dms..lb. .23 • —
powd., dms. .....lb. .24 • —
Potassium bichromate, gran., bgs., c.l., t.l., works..lb. .18 • —
bgs., l.c.l., works .....lb. .18½- .19¼
Potassium bichromate in dms. ½c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 • —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .36 • —
100-lb. bgs., smaller lots, same basis lb. .40 • —
Potassium borohydride, powd., dms., works lb.16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots
Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 • —
Potassium bromide, USP, gran., bbls., kgs lb. .39 • .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 • —
Dom., tech., powd., bbls., dms lb. .21 • .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 • —
bgs., l.c.l., same basis 100 lbs. 9.50 • —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 • —
bgs., l.c.l., works 100 lbs. 8.15 • —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works .....lb. .13½- .14½
Powd., dms., c.l., works.....lb. .12¾- —
dms., l.c.l., works .....lb. .14 • .15
works lb. .12¾- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran., 25-lb. metal dms lb. .39 • —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride indust., 99.9% KCL, bulk, c.l., works ton.29.00 • —
bgs., c.l., works ton.34.00 • —
99.3% KCL, bulk, c.l., works.ton.28.00 • —
bgs., c.l., works.....lb.33.00 • —
USP, cryst., dms. .....lb. .20 • .22
USP, gran., dms. .....lb. .21 • .23
USP, powd., dms. .....lb. .24 • .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 • .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E..lb. .43 • —
powd., 250-lb dms., same basis, lb. .46 • —
Potassium cyanide, dms., 20,000-lb. lots or more, works...lb. .42½- —
dms., 2,000-19,999-lb. lots, works, lb. .43 • —
dms., smaller lots, works.....lb. .44 .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 • —
dms., smaller lots, works .....lb. .55 • —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots .....lb. .29 • —
Potassium fluoborate, fib. dms., c.l., works lb. .30 • —
fib dms., l.c.l., works .....lb. .31 • —
Potassium fluoride, dms., works lb. .36 • .37
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 • —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.33 • —
Potassium iodide, USP, cryst., gran., dms., 500-lb., f.o.b. works, lb. 1.55 • —
Potassium manure salt, min. 20% K₂O, bulk, c.l., works, unit-ton. .17 • .1765
Potassium metabisulfite, gran., dms., lb. .16 • —
Powd., dms .....lb. .27 • —
Potassium muriate, standard, bulk, c.l., works unit-ton. .37½- .39½
bagged 60% minimum K_2O, same basis..ton.26.60- .27.80
Gran., bulk, c.l., works unit-ton. .38½- .40¼
bagged, 60% minimum K_2O, same basis..ton.28.10 -30.10
Inside prices apply to material contracted for prior to July 1, 1960.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots..100 lbs.17.00 • —
bbls., smaller lots....100 lbs.18.00 -19.00
gran., bgs., 20-ton lots..100 lbs. 9.50 • —
bgs., smaller lots.....100 lbs.11.00 -12.00
powd., bgs., 20-ton lots..100 lbs.10.50 • —
bgs., smaller lots ...100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 • —
Potassium pentaborate, gran., dms., c.l., works ton.219.50 • —
dms., ton lots, ex whse..100 lbs.17.48 • —
dms., smaller lots, ex whse..100 lbs.18.73 • —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works..lb. .18½- —
dms., l.c.l., works .....lb. .19 • .20
Potassium permanganate, coml., kgs., works..lb. .25 • .33
USP, dms., works.....lb. .29 • .35
Potassium persulfate, dms., c.l., works..lb. .17½- —
dms., l.c.l., works .....lb. .18 • .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- .1575
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1.2.0, dms., c.l., works 100 lbs. 6.50 • —
dms., l.c.l., 5 dm. lots or more, works.....100 lbs. 7.25 • 7.65
tanks, works.....100 lbs. 6.15 • —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 • —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 • —
tanks, works 100 lbs. 5.50 • —
Potassium silicate, glass grade, bgs., c.l., works 100 lbs.17.30 -18.00
bgs., l.c.l., works 100 lbs.17.80 • —
Soln., 39° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 • —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 • —
tanks, works 100 lbs. 4.60 • —
Potassium silicofluoride, bgs., works, lb. .09¼- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.

Potassium stannate, dms., frt. alld, E..lb. .775 • .842
Potassium sulfate, min. 90% K_2O, agricultural, bulk, c.l., works unit-ton. .70½- .72½
Inside price applies to tonnage contracted for prior to July 1, 1960.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms., lb. .31 • .33
NF VII, gran., 400-lb. dm.....lb. .16 • —
NF VII, powd., 400-lb. dm.....lb. .17 • —
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 • .98
Tech., dms., works lb. .77 • .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works.....lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price, ton.13.45 • —
bulk, works, July forward ton 14.00 • —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb dms., c.l., works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 • —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 • —
fib. dms., l.c.l., works.....lb. .52½- .55
Pregnenolone, bots. .....gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld..lb. 2.25 • —

Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.48 • —
dms., 500 lbs .....lb. 2.45 • —
dms., 100 lbs .....lb. 2.50 • —
Progesterone, USP, bots.....gram. No prices.
Pregnenolone acetate, bots....gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., t.l., same basis lb. .48½- —
tanks, same basis .....lb. .45 • —
Propionic acid, syn., pure, dms., c.l., dlvd..lb. .23¼- —
dms., l.c.l., dlvd. .....lb. .24¾- —
tanks, dlvd. .....lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd.....lb. .16¼- —
tanks, dlvd. .....lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 .15
dms., l.c.l., dlvd .....lb. .15½- .16½
tanks, dlvd. .....lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 2.45
Propyl thiouracil, bots., 20 kilo lots or more kilo.55.00 —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb 1.34 —
dms., l.c.l., same basis lb. 1.255 —
n-Propylene dichloride consumers', dms., c.l. dlvd. E lb. .0645- —
dms., l.c.l., same basis..... lb. .0995- —
tanks, same basis .....lb. .07 —
Propylene dichloride prices in West 1c. higher, same basis.

Propylene glycol, indust., dms., c.l., dlvd E lb .15 —
dms., l.c.l., same basis lb .16¾- —
tanks, same basis .....lb .12½- —
USP, dms., c.l., dlvd E.....lb. .17 —
dms., l.c.l., same basis .....lb. .18¾ —
tanks, same basis .....lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb .20 —
dms., l.c.l., same basis lb .21 —
tanks, same basis .....lb. .18½- —
Propylene oxide dms., c.l., dlvd E, lb .17 —
dms., l.c.l., dlvd. E .....lb .18½- —
tanks, dlvd. E .....lb. .14½ —
Psyllium seed, black, bgs.....lb. .33 .40
Blonde, bgs. .....lb. .18 .20
Husks, bgs. .....lb. .42 .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾ .04¼
bgs., smaller lots .....lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs. ton lots lb .06½- —
fine, bgs. ton lots lb .04 —
sun dried, coarse, bgs ton.60.00 —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs .....lb. .25 .28
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 • —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 • —
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 • 9.80

One oil guarantees
full orange flavor
every single time
It's Exchange Orange Oil, U.S.P., California Cold Pressed. Here's orange flavor as it should be—with the full flavor, aroma and color of California's finest oranges. And it is uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of quality oranges at their command, could bulk-blend an oil with such consistent flavor balance.
Always look for "Exchange" on the tamper-proof container seal—your guarantee it was pressed and packed by the Sunkist Growers. You can depend on it.
Sunkist Growers
Products Sales Department, Ontario, California
Exchange Brand Orange Oil is distributed in the U. S. by Dodge & Olcott, Inc.; Fritzsche Brothers, Inc.; Ungerer & Co.
Exchange

Pyrethrum liquid, 100-1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal. 45.90 - 46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 11.00 - 11.35
purif, 20%, dms., works lb. 11.00 - 11.35
Pyridine, denat, dms, c.l. works and frt, equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2° non-ret, dms., c.l., same basis lb. .75½- —
dms., l.c.l., same basis lb. .76 - .76½
tanks, same basis lb. .71 - —
Pyridoxine hydrochloride, USP 500-gram bots, dms., f.o.b. works kilo. 95.00 - 100.00
Pyrites, Canadian 48-50% S, mines, long-ton 4.50 - 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid tech, bbls., 100-lbs., f.o.b., works lb 3.50 - —
Pyrogallol, NF 100-lb dms lb 3.50 - —
Pyroxylin, USP bots lb 9.50 - —

Q

Quassia chips lb .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.75 - —
Quinidine sulfate, USP, 1,000-oz. dm oz 74½ —
Quinine, NF, 1,000-oz, dm. oz. .3750- —
Quinine bisulfate USP 1,000-oz dm. oz. .28 - —
Quinine hydrochloride, 1,000-oz dm oz. .3650- —
Quinine sulfate USP, 1,000-oz dm. oz. .3150- —
Quinoline dms, c.l. frt, equald lb 50¾ —
dms., l.c.l., same basis lb 51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., frt alld., 100% basis lb .98 - —
Powd, frt alld, 100% basis lb. 1.06 - —
Rapeseed oil, dms. lb. .15¾- .16
tanks lb. .14 - .14¼
Rare earth oxalate, NF, 45-50%, bgs, works lb 1.15 - —
Rauwolfia serpentina root, powd., bbls, dms lb. 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS

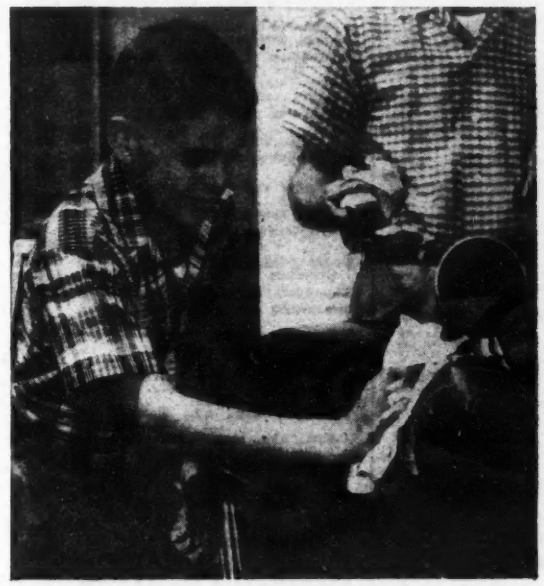
Red pigment quotations are listed individually For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Red toner, Lake C, alizarine, bbls., works lb. 1.30 - —
Reserpine, cryst, bots gram 1.25 - —
Resorcinol, tech, grade, bgs., c.l., works, frt equald lb. 77½- —
bgs., l.c.l., same basis lb. 78½- —
Resorcinol in dms., 1c. per lb. more.
USP, powd., dms., works lb 2.95 - —
Resorcinol monoacetate, NF dms. lb. 2.50 - —
Rhatany root, bgs lb .14 - .16
Rhodamine red toner, molybdated, PMA, kgs, works lb 6.00 - —
Tungstated PTMA works, kgs lb 6.60 - —
Rhodinol, 5-lb cans lb. 42.00 - 51.00
Synthetic lb. 14.00 - 16.00
Rhubarb root, India, whole, bgs lb .25 - —
powd, bgs lb .35 - —
Riboflavin USP fib dms., kilo or more dlvd kilo. 36.00 - —
Riboflavin, 5-phosphate-sodium fib dms, kilo or more, dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms, t.c.l. lb. .14 .14½
tanks, dlvd E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate)
Roofing pitch (see Coaltar pitch, roofing)
Rose oil, nat., Bulgarian, bots lb. 1,152.00 —
Turkish, bots lb. 560.00 - 750.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.40
Spanish tech, cns, dms lb .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib, dms., works unit-lb. .10½- —
Resin, 25-45% fib dms, works, unit-lb. .10½- —
Rottenstone, bgs, 5-ton lots, exwhse lb. .03¾ —
bgs, ton lots, same basis lb. 04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Rue oil, bots lb 2.75 3.00
Rutin, NF fib dms., 10 kilo lots, kilo. 11.00 - —
fib, dms., 5 kilo lots kilo. 11.50 - —
fib, dms., 1 kilo kilo. 13.00 - —
Ryania, 100% powd., bgs., c.l., works lb .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb lots lb 1.40 - —
dms., smaller lots lb. 1.50 - —
USP powd., soluble, insoluble, dms., 1,000-lb lots lb 1.45 - —
dms, smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb lots lb 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms, New York lb. .1795- .1820
tanks, Atl. Coast lb. .1795- .1620
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms lb .65 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns lb. .15 - —
Italian, cns lb. .18 - —
Sage oil, clary, bots lb. 12.00 - 15.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb 1.25 1.75
Sal soda (see Soda ash).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms, t.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid tech., fib dms., c.l., t.l., dlvd lb. .40½- —
fib dms, t.c.l. dlvd lb. .44¾- —
Salicylic acid, USP, cryst, 200-lb. fib. dms., 1,000 lbs or more lb. .51¾- —
200-lb. fib dms., less than 1,000 lbs lb. .54¾ —
Salicylic acid, cryst., 100-lb. fib, dms., 1,000 lbs. or more lb. .53¾- —
100-lb fib dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb fib dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom, bulk, works, 100% Na2SO4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian, chips, bgs., lb. .55 - .66
powd, fib dms lb 75 - .76
Sandalwood oil, cns lb. 21.00 —
Sarcosine, tech., tanks, f.o.b., works, frt equald lb 1.03 —
lb No stocks
Sassafras oil, artif., dms lb. 45 —
Nat., dom, dms lb 1.40 - —
Savory oil, cns lb 4.75 - —
Schaeffer's salt paste, dms., frt. alld 100% basis lb. .85 - —
Powd, bgs, frt alld, 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid, CP, bgs, c.l. works lb. .69½- —
bgs, l.c.l., works lb. 71½- —
Purified, bgs, c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture fib dms, 5,000-lb. lots lb. .30½ —
fib dms., smaller lots lb. .31 .33
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 2.95 - 3.00
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms., l.c.l lb. .37 - .38
Sesame seed, Colombian, bgs lb. 15½- —
Lebanese, hulled, bgs lb. 19 - —
Nicaraguan, hulled, bgs lb. .25 - —
nat., bgs lb 14 - —
Salvadorian, Nat, bgs lb .16 - —
Shellac, bleached, bonedry, bgs. 1,500-lb. lots lb. .47 - —
dms., t.c.l. works lb 22 .20½
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb higher for all packages.
Shellac, bleached, refd, bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb lots lb. .58 - —
Shellac, orange, lemon No 1, bgs., 10-bg. lots lb. .37 .39
lemon No. 2, bgs. 10-bg. lots. lb. .34 .37
superfine, bgs. 10-bg. lots lb .32 .34
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., t.c.l., works lb. .06¾ .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., t.c.l., works lb. .07 .17
Silica, amorph., dry-grd, 325 mesh, bgs., c.l., works ton. 25.00 —
bgs, t.c.l. works, ex whse. ton. 45.00 - 55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l. works ton. 20.00 - —
bgs., l.c.l., works ton. 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton. 15.00 - —
bgs., t.c.l. works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, ex Troy oz. .91⅜- —
Silver cyanide, bots, 1,000-oz. lots, oz. .94¾- —
bots, 500-oz. lots oz. .95¼- —
bots., 100-oz lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots, 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 —
Snakeroot oil, Canada, cns lb. 40.00 - 43.00
Soapbark, crushed, bls lb. .30 .35
Powd., bls lb. .35 .40
Whole, bls lb. .20 .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 —
paper bgs., t.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l. works 100 lbs. 1.60 —
Soda ash, light, 58%, paper bgs., c.l., works 100 lbs. 1.85 —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs. 1.55 —
Soda, caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs 5.20 - —
liq, 50% sellers tanks works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 3.00
Soda, caustic, liq, 73%, sellers' tanks, works, dry basis, 100 lbs. 3.00 —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10
solid, 76% dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs, smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, annyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., t.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom, 300 lbs. or more lb. 1.03 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., t.c.l. dlvd E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb. dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos, dms., f.o.b. works kilo. 6.80 - —
less than 100-kilos kilo. 7.05 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., t.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l., frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l. works 100 lbs. 2.95 - —
bgs., t.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., t.c.l. works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., t.c.l. works lb. .13½- .14¼
Sodium bichromate in dms, ¼c. per lb higher
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½- —
bbls., t.c.l., same basis lb. .2025- —
Sodium bisulfate bulk c.l., works, 100 lbs. 2.00 - —
dms, c.l., frt. equald 100 lbs. 3.00 3.60
dms, t.c.l., frt equald 100 lbs. 3.50 4.10
Sodium bisulfite annyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., t.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls, c.l., works. 100 lbs. 1.70 - —
bbls, t.c.l works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb. 19.90 —
dms., t.c.l. works lb. 33.00 - 40.00
Sodium borohydride, stabilized water soln., 12% NaBH4 100% basis, dms, works lb. 15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran, dms., works lb. .40 - —
Sodium carbonate, cryst, monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., t.c.l. works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 —
dms., t.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms, 20-dm lots or more, works lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms, t.c.l., works lb. .28 - —
Sodium chromate, anhyd, fib, dms., c.l., t.l., works lb. .14¾- —
fib, dms, t.c.l., works lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., t.c.l. lb. .1065- .1190
Sodium citrate anhyd., 200-lb. dm., f.o.b works E lb. .62 - —
NF VIII, gran, bgs., c.l., same basis lb. .26 - —
USP XIV gran, bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP, powd, prices ½c. higher.
Sodium cyanate, dms, 1,000-lb. lots, works lb. .85 - —
dms, smaller lots, works lb. .90 - 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb lots lb. .198 - —
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms, c.l., works lb. 18¾- —
Tech, 33-35% acetic acid, dms., t.c.l., works lb. .15 - —
250-lb dms, t.c.l. works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln, dms, c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., t.c.l., t.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs, smaller lots lb. .14¼- —
Sodium fluoride white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib, dms., t.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - —
bgs, t.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b works E lb. .84 - —
Tech, bgs, c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b shipping point, lb. 2.20 - —
dms., 50-99 lbs. same oasis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs or more, same basis lb .95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms, c.l., frt. alld lb. 23½- —
dms, t.c.l. frt alld. lb. 25¾- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm. lots, lb. 23½- .26
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms, 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms., c.l., dlvd. lb. .20½- —
dms., t.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
bgs., smaller lots, ex whse 100 lbs. 4.40 7.00
t.c.l., bgs., works
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l. works ton. 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bgs., smaller lots, ex whse 100 lbs. 9.61 - 11.61
Tetrahydrate, bgs, c.l., works ton. 210.00 - —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 - 18.08
Sodium, metallic, bricks, c.l., works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., t.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., t.c.l., works 100 lbs. 4.80 - 6.75
dms., t.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.35
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 .99
Cryst., dms., works, frt. alld lb. .74 .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .72 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton. 48.00 - —
bulk, c.l., works ton. 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton. 48.00 - —
bulk, c.l., same basis ton. 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., t.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works 100 lbs. 5.65 —
bbls., t.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15 40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., t.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., t.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 —
Sodium perborate NF, tech., bgs., c.l., works lb. .18½- —
bgs, t.c.l., works lb. .19 .21
Sodium peroxide, dms., c.l., t.l., dlvd E of Miss lb. .21½- —
dms., t.c.l., same basis lb. .22 .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF powd, dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs, c.l. frt equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 - 9.35
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt equald 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90
Dibasic duohydrate, bgs., c.l. frt equald 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 - —
Monobasic, anhyd bgs., c.l. frt equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - 10.15
Tribasic, anhyd, bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., t.c.l., frt. equald 100 lbs. 9.60 - 10.20
Sodium phosphate in dms. 60c. to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms, dlvd E of Rockies, lb. 34½- —
Prices W of Rockies 3c. per lb more
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald 100 lbs. 11.25 - —
bgs., t.c.l., same basis 100 lbs. 12.00 - 12.50
Sodium pyrophosphate, terric, dms., c.l., t.l., works lb. .36 —
dms, t.c.l. works lb. .37 .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., t.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. .78½- —
dms., less than 1,000 lbs. dms lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 —
Sodium sesquicarbonate, bgs., t.c.l., dlvd. zone 1 100 lbs. 4.10 4.35
dlvd. zone 2 100 lbs. 4.35 4.60
dlvd. zone 3 100 lbs. 4.75 4.90
dlvd zone 4 100 lbs. 5.35 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss. south of 31°; Tex E. of 100°; S of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso) (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —
Sodium sesquisilicate hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms, 6,000-19,900 lb lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., t.c.l., works 100 lbs. 1.90 2.40
tanks, works 100 lbs. 1.20 —
47° Be., 1:2.9.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., t.c.l., works 100 lbs. 2.60 3.45
tanks, works 100 lbs. 1.90 —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., t.c.l., works 100 lbs. 3.00 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., t.c.l., works lb. 725 —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld., E lb. .633 - .682
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd. bgs., c.l., dlvd E. ton. 56.00 - —
Sodium sulfate, tech., detergent, rayon grade, bgs., c.l., works ton. 38.00 - —
bulk, c.l., works ton. 34.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., t.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton. 130.00 - —

Sodium sulfide, flake, dms., c.l., works, f.o.b., frt. equald. lb. .08 - —
dms., l.c.l., same basis ..... lb. .07 - —
Fused, bbls., c.l., works, f.o.b., frt. equald. lb. .05½- —
bbls., l.c.l., same basis ..... lb. .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms. ... lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs. l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs. l.c.l. l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E. lb. .35½- —
10-lb. cns., c.l., frt. alld E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald. 100 lbs. 7.90 - —
bgs., l.c.l., same basis ..... 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 —
bgs., l.c.l., works ..... 100 lbs. 9.70 -13.13
dms., c.l., works ..... 100 lbs. 9.45 —
dms., l.c.l., works ..... 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd. lb. .22½- —
dms., l.t.l., same basis ..... lb. .23 - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F. b.r., 14° 16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas ..... gal. .29 - —
355° 420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas ..... gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F. b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
Solvent naphtha, 319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F. b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33½- —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works ..... lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 .28
powd., dms., c.l., works ..... lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works ..... lb. .27 - —
tanks, works ..... lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works ..... lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ... ton 57.00 - —
Soybean oil, crude, tanks, Decatur, lb. .11⅞- —
Foots, soapstock, acid 95%, tanks, lb. .05⅝ Nom.
Refd., alkali, dms. ..... lb. .16½- .16⅝
tanks ..... lb. .14½- —
Clarified, dms. ..... lb. .15⅝- .15⅞
tanks ..... lb. .13⅝- —
Salad, dms. ..... lb. .16½- .16⅝
tanks ..... lb. .14½- —
Soybean oil acids, dbl. dist., dms., lb. .16 - .18½
tanks ..... lb. .13½- —
S. D., dms. ..... lb. .14¾- .17¼
tanks ..... lb. .12¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb. .75 - —
Spearmint oil, NF, dms ..... lb. 6.75 - —
Sperm oil, bleached winter, 45°, dms lb. .1675- .1775
tanks ..... lb. .1475- —
Nat., winter 45°, dms ..... lb. .1575- .1675
tanks ..... lb. .1375- —
Spermaceti wax, blocks, cs. ..... lb. .32 - .33
Cakes, cs. ..... lb. .33 - .34
Spruce oil, cns., dms. ..... lb 2.10 3.55
Squill, white, bls. ..... lb. .16 - .18
Powd., bbls., bxs. ..... lb. .17 - .20
St John's bread, edible, bls. lb. .17 - —
Stannic chloride anhyd. dms., works lb. .803 - .825
Stannic oxide, dms., dlvd. ..... lb. 1.06 - 1.07
Stannous chloride, anhyd dms. works lb. .995 - 1.250
works lb. .86 - .87
Stannous sulfate, dms., works ... lb. 1.06 - 1.07
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. ..... lb. .60 - .61
Stearic acid, dbl., pressed, bgs. lb. .15¾- .18¼
Single-pressed, bgs. ..... lb. .15¼- .17¾
Triple-pressed, bgs. ..... lb. .17½- .20
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston ..... gal. .1475- —
tanks, group 3 ..... gal. .12875- —
Stramonium leaves, bgs. ..... lb. .16½- .18
Streptomycin sulfate, bulk, ... gram. .03 - .032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works ..... lb. .37 - —
Tech., dms., works ..... lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works, 100 lbs. 11.00 - —
bgs., l.c.l., works ..... 100 lbs. 12.00 - —
Strontium salicylate, NF, dms ... lb. 1.83 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works, ton. 56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. ..... oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs. lb. 2.50 - 3.00
Styrax gum, USP cs. lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis ..... lb. .19 - —
tanks, same basis ..... lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l., frt. alld ..... lb. .1509- —
dms., l.c.l., same basis ..... lb. .1709- —
tanks ..... lb. .1259- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene and petroleum refining labor.
Styrolyl acetate, bots ..... lb. 1.03 - 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis ..... lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis ..... lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0955- —
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis ..... lb. .35 - —
tanks, same basis ..... lb. .31 - —
100%, t.l., dms., dlvd. ..... lb. .35½- —
l.t.l., dms., same basis ..... lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose).
Sugar cane, wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 - .65
80-lb ctns., spot ..... lb. .65 - .75
Sulfabenzamide, dms. ..... kilo. 8.80 9.90
Sulfabenzamide-sodium, dms. .. kilo. 9.00 -10.10
Sulfacetamide, USP, fib. dms kilo. 6.61 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms. ..... kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo. 24.80 -25.90
Sulfaguanidine, NF X, dms .. kilo. 5.50 6.60
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 19.85 -20.75
USP XV, powd., dms. .... kilo. 18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 —
dms., l.c.l., t.l., works 100 lbs. 17.50 18.50
Gran., dms., c.l., t.l., works, 100 lbs. 14.75 —
dms., l.c.l., t.l., works 100 lbs. 16.25 -17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb. 1.50 - —
NF, fib. dm., frt. equald ..... lb. 1.55 - —
Sulfanilamide quinoxaline, veterinary, dms kilo. 16.28 - —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld ..... lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd., dms. ..... kilo. 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —



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Sulfur, coml., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines ..... 100 lbs. 3.30 - —
lump, bgs., mines ..... 100 lbs. 2.25 - —
bbls., mines ..... 100 lbs. 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton 23.50 - —
export, f.o.b. vessels, Gulf ports, long-ton 25.00 - —
US and Canada, f.o.b. vessels Gulf ports long-ton 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton 24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines ..... 100 lbs. 6.25 - —
lump, bgs., mines ..... 100 lbs. 4.95 - —
rolls, bgs., mines ..... 100 lbs. 5.50 - —
bbls., mines ..... 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —
Sulfur, rubbermakers, refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05¼- —
ret. dms., l.c.l., same basis lb .06¼- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼- —
dms., l.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton 18.60 - —
Sulfuric acid, 66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ..... ton 22.35 - —
98% tanks, works ..... ton 23.50 - —
99% tanks, works ..... ton 23.70 - —
Sulfuric acid, 100%, tanks, works. ton 23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis. lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton 25.00 - —
40%, tanks, works ..... ton 29.00 - —
65% tanks works ..... ton 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton 90 - .93
bulk, c.l., Carteret, N. J. unit-ton 90 - .93
Superphosphate, triple, 48% or more ... ulv bulk c l East Tampa, Fla. unit-ton 1.00 - —
bulk f.o.b. vessel at Fla unit-ton 1.05 - —
Sweet birch oil, USP, northern cns lb 4.00 9.50
USP, southern, cns ..... lb. 2.00 3.05

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2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb 1.24 - —
dms., l.c.l., works lb 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton 28.00 - —
bgs., l.c.l., works ton 31.00 - 36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton 31.00 - —
bgs., l.c.l., works ton 34.00 - —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized bgs., c.l works ton 38.00 - —
625 mesh micronized, bgs., c l works ton 80.00 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton 34.00 - 39.50
Vermont, off-color grd bgs. c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp. Canadian, grd. bgs., c.l. mines ton 20.00 - 35.00
tanks, works ..... lb. .02⅞- .03⅛
Tall oil, crude, tanks, works lb. .03 - .03¼
Dist, depending on grade, dms., c.l., works lb. .07 - .09¼
tanks, works lb. .05¼- .08
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¾- .08¼
tanks, works lb. .05¾- .07⅛
Tall oil acids, dms., c.l., works lb. .07 - .10
dms., l.c.l., works ..... lb. .07½- .10½
tanks, works ..... lb. .05 - .07½
Tallow, edible, tanks, dlvd ..... lb. .10 - .10¼
Inedible, fancy, bleachable, tanks, b. .06½- .06⅝
fancy, guaranteed, bulk, f.o.b. steamer lb. .07 Nom.
dms., f.a.s. ..... lb. .07⅛ Nom.
tanks, dlvd. ..... lb. .06⅜- .06⅞
No. 1, dlvd ..... lb. .05⅝- .05¾
Prime, tanks, dlvd ..... lb. .06¼- .06⅜
Special tanks, dlvd ..... lb. .06 - .06⅛
Sulfonated, 25%, bbls., l.c.l lb .08½ .08⅝
50% bbls. l.c.l lb .10½ .11
Tallow acids, dist., dms. ..... lb. .12¼- .14¾
tanks ..... lb. .11- —
Hydrogenated, dms. ..... lb. .14½- .17
Tallow oil, acidless, dms. c.l. lb. .13½ —
dms., l.c.l ..... lb .14½- .15½
Tangerine oil, Florida, dms lb 4.75 —
Tankage, animal, feeding, 9-11% ammonia New York bulk unit-ton 4.75 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb. lots lb 1.95 —
bbls., smaller lots lb 1.96 1.99
Tech., dms ..... lb 1.05 —
Tansy oil, dms ..... lb 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis ..... gal. .55½- —
tanks, same basis ..... gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same frt. equald gal. .53½- —
basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis ..... gal. .77 - —
tanks, same basis ..... gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms ..... lb. .50 - .60
Prime, dms. ..... lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 .75
Prime, dms lb. .53 .56
Terpinyl propionate, dms ..... lb. 1.65 - 1.70
Testosterone, USP, bots. .... gram. No prices.
Testosterone propionate, USP bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 —
dms., l.c.l. dlvd. E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works ..... lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., l.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J lb .33½ —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .34½- —
tanks, dlvd E of Denver lb. .31 - —
tanks, dlvd. W of Denver lb. .32 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld. E lb. .39 - —
l.c.l., t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd ..... lb. 7.50 - 10.00
Thallium sulfate, 99%, bots., dlvd. lb 5.00 - 10.00
Theobromine, NF, 6b dms, 100-lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, 6b dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, 6b. dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb 3.65 - —
Thiamine hydrochloride, USP, 6b. dms., frt alld kilo. 36.00 - —
USP, ampule grade, 6b., dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, 6b dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots ..... lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs., works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech, bgs. t.l. frt alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., 6b dms., 100-lb. lots or more. works lb 3.50 - —
di-Threonine, dms., 100 kilos, works kilo. 121.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs ..... lb. .12 - —
triple sifted, bgs ..... lb. .25 - —
Spanish, bgs. ..... lb .09 - —
Thyme oil, NF, red, cns., dms. ... lb. 2.00 - —
NF, white, cns ..... lb. 2.20 - —
Tech., white cns. ..... lb. .40 1.85
Thymol, 6b dms., 25-lbs., f.o.b works lb. 2.45 - —
Thymol iodide, NF, dms, 100-lbs f.o.b. works lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) ..... lb. 1.00 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.)
Titanium dioxide anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. ..... lb. .26½ —
reg., bgs., c.l., dlvd. ..... lb. .25½- —
bgs., l.c.l. dlvd. ..... lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville, Fla. ton. 180.00 —
bgs., 5-ton lots, Niagara Falls, N. Y ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb. .27½- —
bgs., l.c.l., dlvd E ..... lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs., l.c.l., works lb. .09⅞- —
50% Ti O_2, high-tinting, dms., c.l., lb. .14⅜- —
dms., l.c.l. lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 —
dms., l.c.l., works ..... lb. .27½- .29
tanks, works ..... lb. .20 —
Tobias acid, dms., c.l., t.l. ..... lb. .81 - —
dms., l.c.l. ..... lb. .84 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. ..... kilo. 99.00 - —
dl-a-Tocopheryl acetate, bots kilo. 90.00 —
25% dry. powd., bots ..... kilo. 22.50 - 24.00
33% dry. powd., bots. ..... kilo. 30.00 - 31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 —
Paste, kgs., 100% basis lb 1.50 —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb 1.50 —
Tolu balsam, cns ..... lb. 3.60 - 3.95
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Toluene, petroleum, indust., tanks, f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb .16 - —
1,000-lb or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c per lb more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb .84 - —
tanks, same basis ..... lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb .30 - —
dms., l.c.l. same basis lb .31 - —
tanks, same basis ..... lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb. 1.10 - —
Tonka beans, Angostura, cks. ... lb. 1.50 - —
Brazilian, Surinam, cs. ..... lb. 1.30 - —
Totaquine, 100-oz. lots, cns. ... oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. ..... lb. 3.75 3.80
No. 3, cs. ..... lb. 3.40 3.65
USP powd., bbls. ..... lb 1.05 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .985 - —
dms., l.c.l., dlvd. ..... lb. .995 - —
tanks, dlvd lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld. E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms, l.c.l., same basis ..... lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms, l.c.l. dlvd lb .69 - —
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —
Trichlorobenzene, dms., c.l., frt alld. E lb .15 - —
dms., l.c.l. frt. alld. E. ..... lb .16 - —
tanks, frt. alld. E. ..... lb 13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd ..... lb. .16 - —
tanks, dlvd ..... lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works ..... lb. .16¼- —
tanks, works ..... lb. .13½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .12½- —
dms., l.c.l., dlvd. ..... lb. .14 - .14½
tanks, dlvd. ..... lb. .11¼- —
Trichloroisocyanuric acid dms., c.l., t.l., frt. equald lb .65 - —
dms. l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys., works, frt adjusted. lb. 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. ..... lb. .36 - —
tanks, dlvd ..... lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. ..... lb. .36 - —
tanks, dlvd ..... lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .28½- —
dms., l.c.l., dlvd. E ..... lb. .28 - —
tanks, dlvd E ..... lb. .24 - —
Triethanolamine, dms., c.l., dlvd E. lb. .24½- —
dms., l.c.l., same basis ..... lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine, lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 - —
dms., l.c.l., same basis ..... lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt alld. E. of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. ..... lb. .42 - —
tanks, dlvd ..... lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E ..... lb. .22½- —
tanks, dlvd. E ..... lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E ..... lb. .53 - —
tanks, dlvd E ..... lb. .49 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E. ..... lb. .24¾- —
tanks, dlvd. E ..... lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .365
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30½- —
dms., l.c.l., l.t.l., same basis ... lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., l.c.l., works ..... lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. l.c.l., frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., dlvd. E gal. .44 - —
dms., l.c.l., same basis ..... gal. .54 - —
tanks, same basis ..... gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld. E lb. .20½- —
dms., l.c.l. t.l.t. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 —
Tripropylene glycol prices 1c per lb higher in west.
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, dms., 1 kilo, works. kilo. 154.00 —
Tung oil, dms., New York ..... lb. .29 - .29½
tanks, imported ..... lb. .27½ Nom.
tanks, domestic, mills ..... lb. .27¼ Nom.
Tungsten metal powd., 2.0-2.5 microns, dms., works lb. 4.25 —
Tungstic acid tech., dms., 1,000-lb lots, works lb 2.25 - —
dms., smaller lots, works lb 2.45 - —
Turkey red, bbls. works lb. .62 —
Turpentine, gum (see Protective Coatings market, Naval Stores)
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red bbls. frt equald lb 26 .32
Tyrothricin, USP, 1 to 5 kilos gram .50 —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½ .07¾
bgs. l.c.l. works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust. bgs., c.l., t.l., f.o.b. plant ... ton. 100.00 - —
bgs., l.c.l., f.o.b. plant ... ton. 120.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant ... ton. 98.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb .65 - —
dms., l.t.l., same basis ..... lb .70 - —
Uva-ursi, leaves, bls ..... lb .12 - —

V

Valerian root, Belgian, bgs. ... lb .32 - —
Indian, bgs ..... lb .25 - —
dl-Valine, dms., 1 kilo, works kilo. 37.00 - —
Vanadium pentoxide, tech., dms., works lb. 1.38 —
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins .... lb. 7.35 - 7.50
Mexican cuts, tins ..... lb. 7.25 - 7.50
whole, tins ..... lb. 7.75 - 8.50
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs ..... lb. 3.20 - 3.30
Venetian red, jobbing, bgs., works, lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works ..... lb. .0575- —
30%, bgs., works ..... lb. .06 - —
35%, bgs., works ..... lb. .0625- —
40% bgs., works ..... lb .0675- —
Vetiver oil, Bourbon, cns ..... lb. 17.00 - 17.25
Haitian, cns. ..... lb. 12.00 - 14.00
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 4.95
Tungstated, PTMA, 250-lb bbls., dlvd. E of Rockies lb 5.55 —
Victoria blue toner, bbls. prices 1c. higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal dms., l.c.l., dlvd ... lb. .1960- —
tanks, dlvd. ..... lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 —
Vinyl chloride monomer, tanks, works, min. frt. equald. E. lb. .0891- —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 —
Vinyl ethyl ether, tech., dms., c.l., works lb. .30¼- —
dms., l.c.l., works ..... lb. .31 - —
tanks, works ..... lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis ..... lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works ..... lb. 1.35 - —
tanks, works ..... lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —

Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.85.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin) 1-50 grams, vials, tins gram.45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots an 1-5 kilo dms gram. 1.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms.. gram. 1.00 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity gram.52.00 - —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF adsorbed on resin 500-gram bots., 1-5 kilo, dms. frt alld gram. .90 - —
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt alld gram .90 - —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol)
Vitamin D dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum)

W

Wahoo root bark, bls. lb. 2.00 - 2.25
Warfarin 0.5% dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms., 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms. gal.12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb .21 - .22
White precipitate USP, powd., dms., 100 lbs. f.o.b works lb 5.50 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .30 - —
Wintergreen oil USP nat northern, cns lb. 6.35 -17.50
USP, nat southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .30 - .35
Witch hazel leaves, bls lb. .75 - .80
Wollastonite, fine paint grade, bgs., c.l., works ton.41.00 - —
bgs., l.c.l., ex whse ton.51.00 - —
Medium paint grade, bgs., c.l., works ton.29.00 - —
bgs., l.c.l., ex whse. ton.39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns. lb. 4.75 - —

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Xylene, coaltar, indus., tanks, works:
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N.Y. gal. .29½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Xylene, coaltar, indust., tanks, works:
Minnequa, Col gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks f.o.b works:
Bayonne N. J gal. .29 - —
Baytown Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .21 - —
dms. l.c.l. f.o.b., Richmond, Calif lb. .22 - —
tanks, frt. alld. lb. .19 - —
o-Xylene, dms., c.l., works lb. .08 - —
dms., l.c.l., works lb. .09 - —
tanks, works lb. .06 - .06½
p-Xylene, dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .21 - —
tanks, frt alld lb. .1645- —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt equald lb. .23 - —
50°-58°C., m.p., dms l.c.l., works, frt equald lb. .33 - —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis. lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal 1.25 - —
dms., l.c.l., same basis gal. 1.30 - —
tanks, same basis gal. 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms. c.l. same basis. gal. 1.35 - —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 - —
3,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - —
3,5-Xylidine, tech., dms., frt alld. lb. 1.30 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb .39 - —
dms., l.c.l. same basis lb .40 - —
tanks, same basis lb. .38 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Sacchomyces, dlvd lb. .27 - —
Yeast, brewers, primary, USP XV, 150 meg. B^1 per gram, 100-lb. dms lb. .47 - —
USP XV, 270 mcg., B_1 per gram, 100-lb dms lb. .52 - —
Yeast, brewers, primary, USP, XV, 300 mcg., B_1 per gram, 100-lb. dms lb. .58 - —
USP XV, 900 mcg., B_1 per gram 100-lb. dms. lb. .60 - —
Torula, USP, dlvd. lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls lb. .40 .45
Ylang-ylang oil, Bourbon, bots lb. 7.00 -22.00
Ylang Ylang oil, Bourbon, extra bots lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd lb. .343 - —
bgs., smaller lots, dlvd lb. .373 - —
Zinc acetate, NF, VIII, dms. lb. .53 - —
Tech., dms., l.c.l., works lb. .29¾- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 - —
bgs., less than 1,000 lbs., same basis lb. .27 - —
Zinc chloride, NF, gran., dms lb. .42 - —
NF, precip., powd., dms lb. .26 - —
Tech., soln., 50%, dms., c.l., works 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
fused, dms., c.l., works 100 lbs.10.70 - —
dms., l.c.l., works 100lbs.11.20 - —
gran., fib. dms., c.l., works. 100 lbs.11.45 - —
fib. dms., l.c.l., works 100 lbs.11.95 - —
Zinc chromate bbls., dlvd. lb. .29 - —
Basic bbls., dlvd. lb. .34 - —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 - —
dms., smaller lots, works lb. .57 - —
Zinc dust coml. bbls., c.l., works. lb. .16 - —
Pigment, bbls., c.l., works. lb. .15½- —
bbls., l.c.l., works lb. .17¼- —
Zinc fluoride, bbls., works lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½- —
dms., l.c.l., frt. alld. lb. .23½- —
Zinc metal, prime western, slabs, E. St. Louis lb. .12 Nom.
Prime western slabs, New York. lb. .12½ Nom.
Zinc naphthenate liq. 8% Zn., dms., frt. alld lb. .27 - —
10% Zn., dms., frt. alld. lb. .33 - —
Zinc nitrate, tech., flake, 100-lb. fib dms., l.c.l. lb. .16½- —
300-lb. fib. dms, l.c.l. lb. .14½- —
300-lb. fib. dms., c.l. lb. .14 - —
Zinc oxide, pigment, American process, lead-free bgs. c.l., frt alld lb 14½ —
bgs., l.c.l., 10 tons or more, same basis lb 15 —
bgs., l.c.l., smaller lots, same basis lb 15½ —
Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld lb. .15½- —
bgs., l.c.l. 10 tons or more, same basis lb 15⅞ —
50%, bgs., c.l., same basis lb. .15¾- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis. lb. .16¼ —
French process, green seal, bgs., c.l., mills, frt alld lb 16¼ —
bgs., l.c.l. 10 tons or more, same basis lb 16⅝ —
Zinc oxide, French process, green seal, bgs. l.c.l., smaller lots, same basis lb. .17¼ —
red seal, bgs. c.l. same basis lb 15⅝ —
Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis lb. .16¼- —
bgs., l.c.l, smaller lots, same basis lb 15¾ —

FOR A WIDE RANGE OF COATINGS AND COMPOSITIONS SPECIFY

TITANOX*-RA

This general purpose titanium dioxide is the ideal white pigment for many coatings and other compositions that require the outstanding optical properties of rutile TiO_2—the right combination of whiteness, brightness, opacity and color stability.

Modified to retard after-yellowing of organic coatings, TITANOX-RA is a fast dispersing, low-oil absorption pigment adaptable to all dispersion processes. Its uniformity of all properties promotes efficiency in production and high quality in the finished product. Among the products for which TITANOX-RA is particularly suitable are:

• White and tinted industrial enamels and metal decorating enamels and lacquers intended primarily for indoor use . . . because TITANOX-RA contributes to the optimum of all properties. TITANOX-RA is particularly suited to finishes that must have consistently high reflectance.

• Interior white and tinted architectural and household enamels . . . because the high opacity of TITANOX-RA provides high hiding power at low pigmentation . . . accompanied by high gloss, reduction of after-yellowing and uniformity of tinting strength and tone.

• Plastics . . . because generally TITANOX-RA efficiently brightens, opacifies and regulates translucency. However, at the low prime pigment volume of many compositions such as vinyl floor coverings, the new TITANOX-RA-40, developed especially for such use, may be preferred.

TITANOX-RA may well be the pigment that gives you greater value for your pigmentation dollar. To determine the adaptability of TITANOX-RA or other types of TITANOX to your products, we invite you to get in touch with our Technical Service Department for more complete details. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

*TITANOX is a registered trade mark of National Lead Company for titanium pigments offered by Titanium Pigment Corporation.

®TITANOX
the brightest name in pigments

TITANIUM PIGMENT CORPORATION
Subsidiary of NATIONAL LEAD COMPANY

Zinc Oxide—Zirconium Oxychloride

Zinc oxide, white seal, bgs., c.l., same basis	lb.	.16¾- —
bgs. l.c.l., 10 tons or more, same basis	lb	.17¼- —
bgs., l.c.l., smaller lots, same basis	lb	.17¾- —
Zinc oxide, USP dms., c.l. frt alld.	lb	18¼- —
dms., l.c.l., 10 tons or more, same basis	lb	18¾- —
dms., l.c.l., smaller lots, same basis	lb	19¼- —
Zinc phenolsulfonate, NF, gran., dms	lb	45 .46
NF powd. dms	lb	48 .49
Zinc resinate precip 7.2-7.6% Zn, dms., frt. alld	lb.	.45 - —
Zinc silicofluoride dms works	lb	12½ .14
Zinc stearate USP, ctns., c.l.	lb.	.41 - —
	lb	41 —
ctns l.c.l	lb	43 .46
Zinc sulfate powd., monohydrate, 36% Zn bgs. c.l. dlvd.E	100 lbs	8.75 - —
bgs. l.c.l. dlvd. E	100 lbs	9.75 - —
Zinc sulfate in bbls 40c higher		
Zinc sulfide pure bgs. c.l. dlvd	lb.	.2530- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04 - —
Zinc, yellow (see Zinc chromate)		
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 - —
bbls. c.l., works	100 lbs.	10.85 - —
bbls. l.c.l. works	100 lbs.	11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb	.26 - —
Normal, 250-lb. dms., frt. alld	lb.	.55 - —

Zircon (G) gran., bgs., c.l., works	lb.	.03¼- —
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅜- —
bgs., 1 ton to 9,999-lb lots, works	lb.	.04 —
bgs., smaller lots, works	lb.	.06½- —
Zircon (G) milled, bgs. c.l. works.	lb.	.04½- —
bgs., 5 tons to c.l., works	lb.	.04⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝- —
bgs. 500-1,999-lb lots, works	lb.	.07½- —
Zircon (G) in barrels 1c higher		
Zirconium acetate soln., 13% ZrO_2, dms. c.l. 30,000 lbs min., works	lb.	.23 - —
Zirconium hydride powd. electronic grade, dms. works	lb.	14.00 -15.00
Zirconium oxide, CP, white, grd., bbls or bgs. works	lb.	1.50 —
Electric-fused lump, bgs. 500 to 1,999-lb lots, works	lb.	.48½- —
bgs., smaller lots, works	lb.	.51 - —
milled bgs. c.l., works	lb.	.62 - —
bgs., 5-ton lots, works	lb.	.62½- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½- —
bgs., 500 to 1,999-lb lots, works	lb.	.64 - —
bgs. smaller lots, works	lb.	.66 - —
Glass polishing grade, 94-97% ZrO_2, bgs. works	lb.	.55 - .65
Opacifier grade 85-90% ZrO_2, bgs.,	lb.	.27 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½- —

New York AFCA Convenes At Fort Jay on February 28

The New York chapter of the Armed Forces Chemical Association will hold its 1961 annual meeting February 28 at Fort Jay, Governors Island, N.Y.

The program will get under way at 2:30 p.m. with a three-hour classified briefing on chemical, biological and radiological warfare.

Cocktails will be served at 5:45 p.m. in the Officers Open Mess, with dinner following at 7:15 p.m. Dinner speaker will be Lt. Gen. Edward J. O'Neill, Commanding General, First US Army, and US Army representative on the military staff committee of the United Nations.

SAACI Stirs

—Continued from page 7

news from Mr. Tinsley that he was resigning from the association.

Reason: Mr. Tinsley is leaving the chlor-alkali division of Food Machinery & Chemical Corporation, New York, to form his own chemical distributing concern in Asheville, N.C.

Paul E. McCoy of American Potash & Chemical Corporation will continue as treasurer of the organization, while Arthur E. Curran of Meer Corporation will remain its treasurer. The position of SACCI vice-president, vacated by Mr. Griffith on his elevation to the presidency, is still unfilled.

SACCI had two presidents in 1943: Gerald S. Furman of George Uhe Company and Philip J. LoBue of Philip J. LoBue Company. President for several months until his induction into the armed forces, Mr. Furman was thereupon succeeded by Mr. LoBue.

Customs Ruling May Raise Tariff on Synthetic Indigo

Bureau of Customs is changing the method of assessing duties on imports of synthetic indigo. As a result, importers may find the total amount of duties assessed against them greater than heretofore.

It has been the uniform practice of customs appraisers to determine the amount of specific duty on synthetic indigo, color index No. 1177, by multiplying the rate per pound provided by law times the actual weight of the imported merchandise.

The bureau has now ruled that the proper specific duty is the product of the rate per pound provided by law times the actual weight of the importation times the relative strength of the importation (when in excess of 1.0) in comparison with the official standard established by the Secretary of the Treasury.

The new computation will apply only to such or similar merchandise entered or withdrawn from warehouse for consumption ninety days following the date of publication of the ruling in the weekly *Treasury Decisions*.

DuPont Is All Braced

—Continued from page 5

decision of federal judge Walter LaBuy in Chicago in October, 1959, holding that complete divestiture of the GM stock by duPont was not necessary to provide the relief called for by the Supreme Court when it ruled that duPont's stock interest in General Motors was so great that it violated the Clayton act.

Judge LaBuy has since retired from the bench.

In appealing the case, the government contends that nothing short of divestiture of the stock will satisfy the requirements of the Clayton act. It suggested that this be undertaken over a ten-year period so as to lessen the impact on the market price of the stock and pointed to several ways that it might be done.

In its answering brief, however, duPont contends that the government is going unnecessarily far in seeking a remedy. It pointed out that Judge LaBuy had accepted substantially all of the government's proposals for removing duPont's influence in the operations of GM, save that of divestiture of the stock.

DuPont contends that the LaBuy decision, which permits the chemical company to retain its GM stockholdings but demands transfer of the voting rights to the duPont stockholders, "fully and effectively protects the public interest."

The judgment leaves duPont with a "sterile investmnt" in GM, it was stated.

Complete divestiture is not a mandatory remedy prescribed by the Clayton act, it adds, and the government's argument to the contrary would impose extreme and harsh consequences on innocent persons. The government's construction of the statute, duPont says, destroys the most important power possessed by courts of equity by depriving them of their traditional "large discretion" to select or to devise remedies to meet exigencies of a particular case.

Price, Value Different

—Continued from page 7

Chemical Corporation, had a word about inflation. Said he:

"Inflation directly increases costs. The direct consequences, such as increased wages and the cost of goods and services purchased from others, are readily recognizable."

But, he added, inflation creates hidden expenses, and the complete extent of these hidden expenses is often overlooked.

Then, the speaker pointed out:

"The allowance for inflation is an expense that cannot be ignored. It represents an amount that must be retained after taxes merely to keep even with inflation. It is the cost for standing still. It is the expense incurred merely to prevent a contraction and should never be regarded as funds for expansion."

Harry R. Wurster, director of purchases for Wyandotte Chemicals Corporation, demonstrated by reference to sulfuric acid that the skillful purchasing agent can profit from value analysis even when dealing with standard, workhorse chemicals.

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AZO-11	23	40	Acicular	Medium	18	4
AZO-33	27	46	Acicular	Short	16	3
AZO-55	32	60	Nodular	Small	14	2
AZO-55-LO	36	65	Nodular	Medium	12	1
AZO-66 (French)	28	—	Nodular	Fine	12	–
AZO-77 (French)	24	—	Nodular	Fine	12	–

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Founded October 18, 1871 by William O. Allison
Directed 1900-1942 by Harry J. Schnell

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SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y.
(RE 2-9820) Cable Address: Reporter, New York
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Volume 179 February 6, 1961 No. 6

A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		November 1960	November 1959
Acetic Acid, Synthetic	lbs.	61,000,329	55,563,124
Acetone	lbs.	61,782,915	60,595,554
Ammonia, Anhydrous	tons	408,035	382,072
Benzene	gals.	36,248,483	26,821,552
Chlorine	tons	377,081	376,636
Formaldehyde (37% basis)	lbs.	136,113,120	157,832,569
Methanol, Synthetic	lbs.	166,337,554	154,845,951
Phthalic Anhydride	lbs.	26,519,673	17,481,148
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	403,381	406,987
Sulfuric Acid (100% H_2SO_4)	tons	1,433,797	1,437,902

Sources: Tariff Commission, Bureau of Census

The State of the Union

President's Kennedy's message of January 30 to the congress on "The State of the Union" is "must" reading, study, discussion, analysis and an implementation guide for every national, regional and local general or specific industrial and commercial organization in this country. What he had to say about that condition was most serious in many implications—especially in the direction of variously based, more variously designed and most variously effective potentialities. The response of the New York stock market to the one thin ray of hope and expectation presented in his remedial program for the gloominess which he quite justifiably reported provides a firm basis for conclusions on what could be the immediate—although possibly short-lived—response to any federalistic, nationalistic or socialistic move to take the private economy out of the hands of private enterprise.

The President is going to call upon the congress to help boost everything from employment to exports. If private enterprise wants to keep on going "as per usual," it certainly must beat the two federal departments to everything connected with the job of dealing effectually with the economic sag. That objective cannot be attained by way of at least orally popular belief that production should be further promoted. The need is for consumption that will take care of existing productive capacity.

The meeting of that need calls for two things: (1) more and better selling push; (2) more buying power. Government wants to promote the latter by means of costly, more or less deserved jobless aid and a higher minimum wage. Both of those would cost as much as they would produce. Private enterprise —and every payer of a federal tax — should push the pending program for necessary tax reform which will encourage investment in the creation of jobs.

Recognizing Needs of Latins

Many, if not most, of those who for some reason or another have seriously concerned themselves with study of some aspect of the interrelations of the peoples of the Western Hemisphere have found reason to believe that the best place to get a reliable analytical commentary on the matter is in Panama, where the reported political and popular feeling is what might be called "intentionally antagonistic."

On that basis, there is more than a little food for thought—and for desirable expectation—to be found in a recent statement by a former president of Panama who is now its permanent representative in the United Nations. He is reported to have said that "Latin America has high hopes for intensified development under the leadership of the new Democratic President." What he meant by "intensified development" and "leadership" can be any number of things in many areas of political, commercial and social relations—any one of which could, and doubtless would, be contributory to what is needed in (hemispherically speaking) Western unity.

The Panamanian's expectation—or prediction—was given promising support by way of President Kennedy's inaugural pledge to "forge in the Western Hemisphere a new alliance for progress"—which is synonymous with "development" in every sense of the term. A commendable manifestation of understanding in that connection is presented in the reported intention of the President to name a Puerto Rican to the post of deputy assistant Secretary of State for inter-American affairs. Such recognition of specific fitness in an area of international relations where it is now very difficult to find it will be very good for US political relations with its Latin fellow-Americans.

It is seriously to be urged that a similar manifestation of real Americanism be developed and applied in other areas of relations and contacts—especially the commercial. In that connection there is much of beneficial—and essential—usefulness to be learned from the book, "Social Change in Latin America Today—Its Implications for United States Policy," recently published for the Council on Foreign Relations by Harper at $5.

It is not alone in his intention to put a Latin in the important post of Latin-American affairs that President Kennedy has made it evident that he has a serious interest in the needs of Latin Americans for what this country—its people more than its government—can at least help them to get. Those in the know are strongly inclined to believe and to expect that he will respond approvingly to the request made six months ago by Brazil, that the US program for Latin-American aid be integrated with "Operation Pan-America," proposed by the president of that country, and made a part of a general Western Hemisphere effort to raise standards—and possibilities—of living.

Latin-American delegates to the United Nations have expressed high hopes of developments in that direction, even those who do not go along with the objective of the doubtfully reported inclination of President Kennedy to have a study made on the taking of at least certain short steps in the direction of renewal of diplomatic relations with Cuba.

Conditions in that direction are getting various considerations from several sources with reference to the problems arising from the influx into this country of refugees from Cuba and other Latin-American countries—north of Panama. Among the latest developments in that area of human relations is the recent announcement by the Governor of New York that his state is opening an office in New York City to provide an estimated 15,000 refugees with information on employment possibilities, US visa regulations, medical care, housing, schools, and aid through other social service agencies.

The Latin needs are many, and they have serious potentialities. The Communists are well aware of that condition and are striving vigorously to take advantage of the opportunities which they present. The United States must meet the resultant challenge.

Washington Talks It Over

Four Weeks to Go Before Food Additives Law Becomes Fully Effective and Now the Question: Will Congress Act in Time to Ease the Burden of the Chemical Industry?

By Ralph L. Cherry
Washington Editor

Four weeks remain to the date when the food additives law is due to become fully effective. Unless congress intervenes, no additive that has not been recognized as safe for use by experts, or been cleared by Food & Drug Administration for use within prescribed limits, can be sold for food use after March 6.

The situation creates cause for concern in the chemical and food industries. For, with time rapidly running out, so too are hopes that congress might see fit to amend the law—thus giving more flexibility to the Delaney anti-cancer clause, and greater insurance that questions of additive safety shall be resolved on the basis of scientific evidence and proof.

As matters now stand, congressional observers can't see congress making any changes in the food additives law, particularly the Delaney anti-cancer clause, without first holding extensive hearings.

And the best chances of getting the changes in the law would be to have them ride in on the coat-tails of the bill delaying the effective date of the law. But as time slides by, this looks to be more of a dream than a possibility.

It is more than possible. In fact, it is probable that a bill extending the March 6 deadline date will be passed, but that is about as far as congress will be willing to go at this time. What with the change in administrations, the row over the rules committee in the house and the pressures for early action on legislation to cure the nation's economic ills, observers look for only the minimum being done on food additives at this time.

In fact, it is difficult to stir up much interest among members even on the simple question of extending the effective date of the law—no matter how important this might be to some chemical manufacturers. Members are understandably more concerned at the moment with such matters as growing unemployment in their home districts, moving the Kennedy program ahead, getting jobs for constituents in the new administration, etc.

The fact that sales of some chemical might have to be held up after March 6 until test work has been finished, doesn't arouse much of a sympathetic response in congress at this time.

Later in the year, or next year, congress may be more inclined to consider the problems being raised by the food additives law, if industry can make out a good case for changes. But right now it appears to be too stirred up with other matters to do anything more than the minimum necessary on this score.

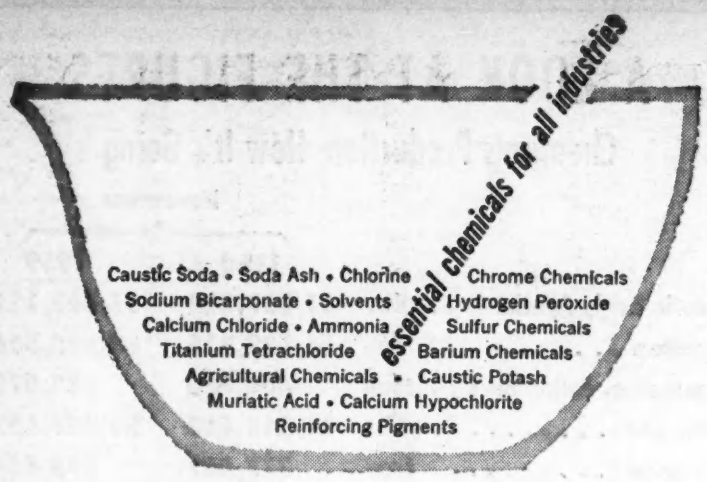
OPD'S BOOKSHELF

Organic Syntheses

The 1960 volume of Organic Syntheses*, fortieth in the series, has just come off the press. The book details the preparation of some thirty-nine different organic compounds, adhering to the usual format.

Following the name of the chemical, it sets forth the appropriate procedure, gives a few words of caution together with notes on the reaction, the apparatus set-up and methods of preparation.

* ORGANIC SYNTHESES, VOLUME 40. 114 pages. John Wiley & Sons, New York. $4.



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Heavy Chemicals

Fluoboric acid and fluoborates were raised 1 to 3 cents a pound to offset increased handling costs. Copper chemicals held steady, encountering fair call at price levels recently reduced on the heels of lower copper. Sulfuric acid, though a little firmer in the east thanks to a posted advance in sulfur, nevertheless continued to move at prevailing levels; and while an advance to list quotations was not ruled out, the sagging steel picture was thought to be wielding an influence potently counter to the sulfur boost. Mercury was unchanged at its long-holding range, tin quiet, and silver steady with a firm undertone.

Sodium sulfate supply remained snug, observers rating it just sufficient to cover current needs and wondering whether the resumption of activity by soapers in March would find bins adequately stocked.

Prices of lithium carbonate were reported unchanged at the sharply lower levels that went into effect in mid-December. The cut at that time, amounting to 10 cents a pound, was made to spur consumption. Used for upgrading the final product, lithium carbonate can be incorporated in smaller or greater amounts, depending upon price, it was pointed out.

Least pleasing in the current business picture, sulfur makers said, is the continuing slump of steel which, already a prong in the side of sulfuric acid, threatens, if unrelieved, to drive all the way into the starting material.

Though plant food on stream time approaches, scant help, if any, is seen emanating from that quarter. Fertilizer raw materials—phosphoric, nitric, sulfuric acids—have become largely an intramural affair, it was pointed out.

The American Paper and Pulp Association reported production for the week ended Jan. 28, at 89.7 percent of theoretical capacity, as compared with the revised figure of 88.9 percent for the previous week and 96.3 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
106.84	106.85	106.85	106.82

For Current Prices see Page 10

Acids

Fluoboric—Prices have been advanced 2c. a pound to offset increased handling costs. Carboys of 13 gallons are newly quoted at 21c. a pound in truckloads, and 22c. in smaller amounts. As this material, a relatively small volume one moving to the electroplating industry, is not quoted in OPD's price pages, the price change does not affect the market index.

Hydrochloric—Oil well treating, food processing and chemicals comprise a group of reasonably active accounts, the first two being all but recession-proof. Demand in these quarters has done much to alleviate the doldrums of lagging steel, trade sources said last week.

Hydrofluoric — Perrenially optimistic, aluminum makers continue to absorb hydrofluoric and other processing materials in good volume, reasoning that the light metal's expanding share of such markets as building products and household utensils should mitigate the force of recession.

The share of aluminum going into building products in the third quarter of 1960 showed a 3.7 percent increase over the previous quarter, according to a report from the Aluminum Association.

Sulfuric—The higher tag on sulfur has so far failed to catch up with this market where the depressed steel industry casts its longest shadow.

Though plant food time approaches, scant help, if any, is seen emanating from that quarter now that sulfuric for fertilizers has become largely an intramural affair.

Bases and Salts

Borax—Business is reported fair to good, a well-diversified end use pattern providing a conpensatory mechanism against the inevitable soft spots of the partly receded economy, market observers said.

Caustic Soda—Prices were steady.

Lime—Lime sold and used in the US in November totaled 950,966 short tons, a decrease of about 5 percent from the October level, the Bureau of Mines reports.

The figure included 205,109 tons of hydrated lime and 745,857 tons of quicklime. The breakdown by end-uses was as follows:

- Agricultural, 7,898 tons, as against 10,558 in October.
- Construction, 76,459 tons, as against 84,820.
- Chemical and other industrial outlets, 750,315 tons, as against 783,911.
- Refractory (dead-burned dolomite), 116,294 tons, as against 125,220.

Lithium Carbonate—Prices are reported unchanged at the sharply lower levels that went into effect in mid-December.

The cut at that time, amounting to 10c. a pound, was made to stimulate increased consumption. With a material such as lithium carbonate, used to upgrade the final product, a buyer's decision on how much he will use depends more on cost than on technical factors.

Coincident with the price reduction was the establishment of a simplified schedule, half a dozen brackets being telescoped to two. For NF material, ton lots were set at 58c. a pound, smaller quantities at 64c. ex-warehouse. Comparable tabs on technical lithium carbonate became 57c. and 63c. a pound, respectively.

Fluoborates—Advances of one cent to three cents a pound were posted to reflect higher fluoboric acid. Copper fluoborate was increased by one cent; lead and tin by two cents; iron and nickel fluoborates by three cents a pound.

Sodium Sulfate—Supply remains snug, trade sources rating it just sufficient to cover current needs. When pressure is resumed March 1 by the renewed activity of soap makers a relapse in the supply picture may occur, these trade sources say.

Sulfur—Least pleasing in the current business picture is the continuing steel slump, which has been cutting into sulfuric acid volume and threatens, if unrelieved, to catch up with sulfur, a trade source said last week.

The following figures compiled by the Bureau of Mines, show production and shipments of sulfur during specified periods.

	November	October
Native production	399,624	389,930
Shipments	391,001	449,249
Sales*	407,004	484,586
Stocks†	3,553,311	3,560,691
Recovered production	62,778	63,653
Shipments	61,954	58,584
Sales*	60,877	58,949
Stocks†	110,496	108,595

* Calculated from production and change in stocks during the period.

† Producers stocks at mines or plants in transit, and in warehouse at end of period.

The following figures, compiled by the Bureau of Mines, show imports of Canadian and Mexican sulfur into the United States during specified periods in long tons.

	November	October
Ore	10,143	7,208
In any form	56,660	38,615
Total	66,803	45,823
Dollar Value		
Ore	$218,055	$162,206
In any form	1,232,963	798,167
Total	$1,451,018	$960,373

Nonferrous Metals

Aluminum—December production of primary aluminum is reported by the Aluminum Association at 165,504 tons, up from November's 161,208 tons.

This made 1960 a banner year—at least for production, with 2,014,499 tons of the light metal turned out, as compared with 1,954,112 in 1959, itself a record-breaker.

The all-time record month remains July 1959, with 180,287 tons (revised); and the all-time record quarter, the third of 1959, with 521,309 tons (also revised).

Copper—Copper-base mills and foun-

Heavy Chemicals

dries shipped one billion pounds of products during the third quarter of 1960, reflecting a seasonal decline of 9 percent from the previous quarter's 1.1 billion pounds, Business & Defense Services Administration reports.

Available new supply of refined copper dropped during the period, but at the same time, consumption by mills and foundries—particularly wire mills—was at a lower volume. Consumption of copper-base scrap also declined.

With the exception of holdings by copper wire mills, inventories of refined copper and scrap were relatively unchanged from the end of June, BSDA notes. Wire mill inventories of refined copper jumped from 55,000 short tons at mid-1960 to 70,000 tons at the end of September.

Exports of refined copper and copper-base scrap continued in large quantities, rising 21 and 18 percent from respective second quarter levels.

Imports of brass mill products continued to decline, according to the BDSA report.

Mercury—Prices for large lots continued at a range of $209 to $212 a flask in a slow market.

Silver—Price has been long unchanged at 91⅜c. a troy ounce, spot.

Tin—The market was off slightly as the price declined 1c., closing at $1 a pound for Straits metal, spot.

Zinc—November imports of zinc gained about 8,0000 tons over the October level, totaling 46,701 tons, according to the American Bureau of Metal Statistics.

Ores accounted for about 5,000 tons of the increase, the remainder attributed to increased imports of zinc blocks and pigs.

Exports also showed an increase—7,768 tons in November compared to 4,838 tons the previous month.

Western Market Men to Meet

Western Chemical Market Research Group will meet February 16 at the Marines' Memorial Club in San Francisco to hear a talk on "Investing in Chemical Shares Today," by Philip A. Fisher, of Fisher & Co., San Francisco. Mr. Fisher is the author of "Common Stocks and Uncommon Profits" and "Paths to Wealth Through Common Stocks."

Styrene, Butadiene

—Continued from page 4

establishment of laboratories for research and development of manufacturing processes as well as end uses for the products to be offered.

While not disclosing any dates for its consumer market debut, Mr. Kayser noted that the plastics project—which represents an El Paso investment of about $40 million—will substantially increase the net of the products company beginning in 1962 and increasing through 1965.

El Paso and Rexall have already announced (OPD, 12/12/60) new facilities for ethylene and polyethylene manufacture at Odessa, Tex., the first of which are to be brought on stream early next year.

El Paso is building and operating the ethylene plant, while Rexall will operate the polyethylene plant. The raw material, principally ethane with some propane, also will be supplied by El Paso from an extraction plant which it is building.

An initial production of 120 million pounds of polyethylene annually is planned.

Odessa Styrene, which is to be merged with Odessa Butadiene, completed two expansions last year, upping its capacity 80 million pounds.

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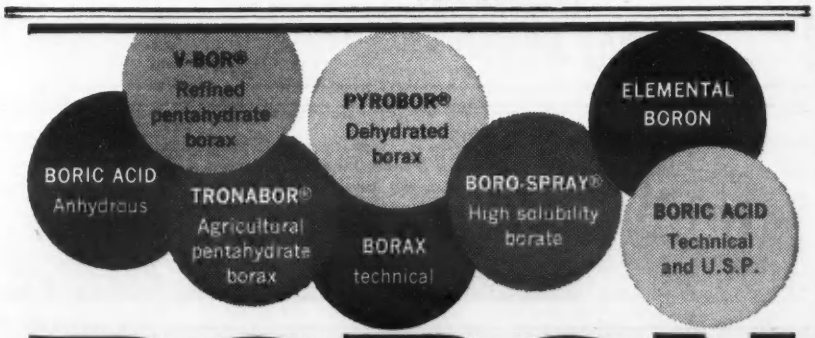

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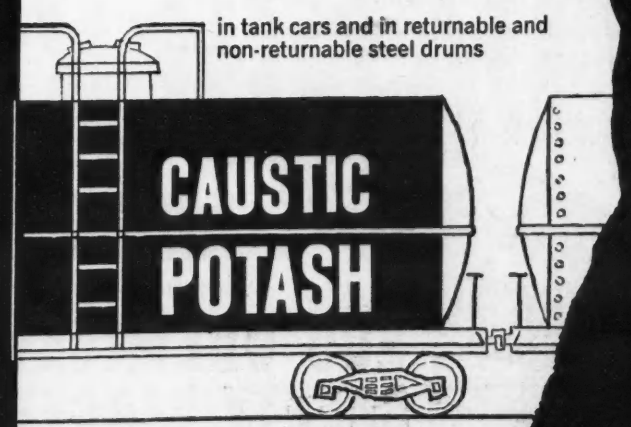
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Soap, Glycerine Group Elects Hoerner President

John M. Hoerner, vice-president of Armour & Co., has been elected president of the Association of American Soap & Glycerine Producers. Elected vice-presidents at the group's annual industry convention in New York last week were:

M. C. Mumford, Lever Bros. Company, for the east. A. W. Schubert, Emery Industries, Inc., re-elected for the midwest, and A. K. Forthmann, Los Angeles Soap Company, for the west. Mr. Forthmann is retiring president of the Association.

Officers re-elected were: treasurer, N. S. Dahl, John T. Stanley Company; assistant treasurer, M. A. McManus, Lever Bros. Company; and secretary, Roy W. Peet, the association's manager.

Kirk Labs Acquires Moore, An Ethical Drug Producer

C. F. Kirk Laboratories, Inc., New York, has acquired Moore & Co., Inc., a fifty-year-old ethical drug manufacturer at Worcester, Mass. Terms of the transaction were not disclosed.

Moore & Co., a producer a pediatric products and other pharmaceutical specialties, will maintain its separate identity and existing management. Plans are underway for a sharp increase in the unit's promotion and advertising budget together with the introduction of new specialties now in the development stage.

Mich. Chemical Enters

—Continued from page 5

cal's rare earths and thorium division will provide rare earth oxides and metals. Michigan Chemical, based in St. Louis, Mich., operates the largest ion-exchange separation facility of its kind in the world for the production of heavy rare earth oxides, as well as an intergrated plant for the reduction and refining of rare earth metals.

Dresser Products, Inc., located in Great Barrington, Mass., is an established specialist in fabricating materials for the nuclear, metallurgical, and electronic industries. The company has broad experience in working special materials and alloys involving rare earth elements and other nuclear materials.

The arrangement will make available to the consuming industries high-purity metals, alloys, and cermets in finished forms and shapes suitable for end use. Particular emphasis will be given immediately to the production of nuclear reactor control rod materials, neutron absorbers and detectors, pure metal foils and wire, alloy foils and wire, rods, extrusions, and related custom shapes as required to meet customer requirements.

Immediately available will be fabricated forms of high-purity praseodymium, neodymium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium and yttrium, as well as oxide mixtures; metal powders; salts, such as oxalates, nitrates, chlorides and sulfates; and rare earth borides and carbides.

Metals & Residues Expands Tungsten, Molybdenum Plant

Metals & Residues, Inc., Springfield, N. J., has completed a fourfold increase in production capacity for high-purity tungsten and molybdenum metal powders.

The company uses an exclusive process, called "Supiro Single-Stage Reduction," which, according to M&R executives, has made possible certain operating economies which should ultimately be passed on to the consumer.

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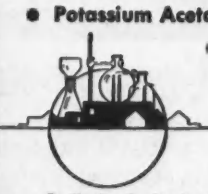

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Agricultural Chemicals

The possibility of some sharp price competition between domestic and imported urea arising from a perennially weak market and sustained by increased amounts of imported material was reported in the trade last week. When contacted by OPD however, importers were quick to deny the report. The foreign produced material is said to be priced right along with domestic urea with little chance of any change.

Importers maintain that the basic market situation has been unchanged over the past few years: demand light; listings slipping. In estimating the level of imports, they report no outstanding increases in the amount of material has appeared on their books.

Nevertheless, Customs' report show sizable boosts in imports during the Fall of last year, as compared to the previous fall of 1959. Last November imports were reported at 7,158 tons of urea while a year ago for the same month imports were reported at 4,425 tons. Domestic production on the other hand, during October, was placed at 44,899 tons and about 50,000 tons in November, according to reports from the Tariff Commission.

According to a report from a leading British fertilizer broker, the world market price for urea is running at about $82 per ton. The domestic price for urea, f.o.b. plant is about $100 per ton for bagged industrial grade urea, in car lot shipments. Agricultural grade urea is about $98 per ton, same basis.

In the same broker's report, the world production and consumption of nitrogen materials is running at about 9 percent over the previous year. Consumption reached 12,083,000 tons, while production was estimated at 12,294,000 tons.

As to current prices, the British broker reports that the European market for ammonium sulfate is at $29 to $30 per ton, up from $28 six months ago. The report also states that there is a fear that increasing quantities of ammonium sulfate as a by-product of caprolactam may have an adverse effect on the market despite the fact that the quantity of the material is felt to be below the standard of synthetic material.

A phosphoric acid plant that was completed last June went on stream last month after a seven month strike, according to an announcement from the company. The initial capacity for the Idaho-based plant has been set at 130 tons of phosphoric acid daily, with an allowance for expansion should demand increase for the product.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
110.71	110.71	110.71	110.95

For Current Prices see page 10

Animal and Plant Foods

Animal Proteins—The market for fishmeal and scrap continues on the quiet side as listings are reported to be unchanged at $92 per ton for meal, bagged on Gulf and Atlantic coasts.

The US Fish and Wild Life Service in its commercial fisheries outlook report describes the fishmeal and scrap market as unsettled with supplies liberal and demand light.

Production of fishmeal through November, 1960 was about 6 percent lower than that during the first eleven months of 1959. Totals were reported US Fish and Wildlife Service as 251,211 tons for 1960 and 266,866 tons in 1959.

Imports of fishmeal during January-October, 1960 were 11 percent lower than in the comparable 1959 period. Peru accounted for about half of the total 109,848 tons imported during the first ten months of 1960. Canada was the second leading supplier. While a large gain in imports was noted from Chile, a very sharp decline was reported in Angolan imports.

Potash—The American Potash Institute reports that the deliveries of potash for agricultural purposes in the US, Canada, Cuba, Puerto Rico and Hawaii by eight principal American producers (including importers) totaled 2,810,762 tons of salts containing an equivalent of 1,643,384 tons of K_2O during the first nine months of 1960.

This was a decrease of less than 1 percents in salts and K_2O under the same period in 1959. Continental US took 1,532,685 tons of K_2O; Canada, 628,323 tons; Cuba, 15,217 tons; Puerto Rico, 16,952 tons; and Hawaii, 16,207 tons K_2O. These figures include imports of 150,697 tons K_2O for only six months of the year. Exports to other countries were at 310,649 tons.

Deliveries of potash for non-agricultural purposes amounted to 116,323 tons K_2O or an increase of 8 percent over last year. Total deliveries for all purposes were 3,514,381 tons of salts, containing an equivalent of 2,070,356 tons of K_2O, an increase of 5 percent in salts and K_2O.

During the third quarter of 1960, deliveries for agricultural purposes were 212,780 tons of K_2O in Continental US, 5,034 tons in Canada, 3,194 tons in Cuba, 705 tons in Puerto Rico and 5,164 tons in Hawaii making a total of 226,877 tons K_2O, a decrease of 46 percent under last year. Import figures for the third quarter of the calendar year are not available at this time. Exports of potash to other countries during the third quarter were 120,298 tons K_2O, an increase of 42 percent.

Urea—The market for domestic and imported material is reported to be holding in its longstanding competitive situation. Reports to the effect that a price cutting situation might be shaping up due to reported increases in the level of imports were denied by importers here. Their experience has not indicated any sharp increase in imports. According to those sources imports of urea have been made at about the same levels as in previous years.

Census reports that in November of 1959, imports of urea totaled 4,425 short tons. Last November, imports were reported at 7,158 short tons. Domestic production of urea, 100 percent basis, total primary production was reported by the Tariff Commission at 44,899 tons in October and about 50,000 tons in November.

Pesticides

The possibility of greater infestations of the cotton crop was indicated by a report last week by the USDA. Department surveys reveal that the hibernation last fall of boil weevils in the cotton-growing areas of Louisiana, Mississippi, Tennessee, North Carolina and South Carolina was much higher than during the previous fall.

Examinations of woods trash adjacent to cotton fields are made annually in late fall and again in the spring by USDA entomologists to determine the number of the weevils surviving the winter. The number surviving provides an estimate of the potential threat to the cotton crop.

Survey counts for the fall of 1960 were 42 percent higher than 1959 counts in Louisiana; 183 percent higher in Mississippi; 104 percent to 209 percent higher in four sections of North Carolina and South Carolina, and 41 percent higher in Tennessee, the Department reports.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during November, 1960, with October's production figures supplied for comparison:

	November 1960	October 1960
	Pounds	
DDT	14,283,090	14,485,690
2,4-D*	*2,991,881	*2,039,697
Ester & Salts	*2,396,982	*1,513,259
Acid equivalent	*1,788,292	*1,024,184
BHC	1,929,502	1,714,310
Gamma isomer	629,200	612,700
2,4,5-T	—	—

* Partly estimated.

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Aliphatic Organics

Production of propylene glycol in November was off 5 million pounds, and butadiene 17 million pounds from October. In addition, seven other major-use, organic chemicals on the 16-item report issued monthly by the Tariff Commission went lower, while seven advanced—the 4-million-pound boost in acrylonitrile output being the most substantial in terms of volume and percentage. Notable, nonetheless, was the modest (about 400,000 pounds) increase in production of ethyl acetate, for which the prevalent trend in the first half of 1960 was downward (in the same category: carbon disulfide).

Output of the majority of chemicals on Tariff's list, however, likely reached record highs last year. A Business & Defense Services Administration analysis of January-July totals, for example, reveals these impressive, seven-month gains: acetic acid, up 18 percent; acetone, 6; butadiene, 15; carbon tetrachloride, 4; ethylene glycol, 15; synthetic methanol, 13; pentaerythritol, 3; perchloroethylene, 4; and trichloroethylene, 1.

Glycerine production for calendar year 1960 totaled 301.8 million pounds, compared with 267.7 million pounds in 1959. Minimizing the gain, however, was the inventory build-up; at year's end, crude and refined stocks held by producers amounted to 56.2 million pounds, an increase of 18.1 million pounds from the year before.

Concern over foreign competition—a growing threat to makers of several, large-volume organic chemicals—is taking many forms. Last week in Washington, the ubiquitous Senator Kenneth B. Keating (Rep., N. Y.) introduced a bill to streamline administrative procedures for relieving domestic industries and workers injured by increased imports from the so-called "low-wage" areas.

Under Keating's bill, the Secretary of Labor would be a prime mover in these cases. After receiving an appeal from an "injured" industry, the secretary would request trade and economic data from the Tariff Commission, make an investigation, and ultimately recommend appropriate action to the President who could accept or reject—in part or in full—the recommendations. Such action could include tariff, quota, or tariff-quota relief.

2-Ethylhexanol—There will be a third US producer of 2-ethylhexanol by early next year. Last fortnight, a leading chemical firm disclosed plans to build facilities for the manufacture of the iso-octyl alcohol and a requisite intermediate, acetaldehyde, on a 1,000-acre site near Bay City, Tex.

The announcement of the expansion contained no information as to cost or size of the new facilities, but other sources figure the cost at about $12 million, and the capacity of the 2-ethylhexanol unit at about 15 million pounds a year.

The firm expects to begin construction in the next quarter and anticipates completion within a year.

The expansion probably reflects the growing requirements for 2-ethylhexanol in the manufacture of dioctyl phthalates, including n-octyl, iso-octyl, 2-ethylhexyl, and capryl.

Because of its "compatibility, low volatility, and high efficiency," di-2-ethylhexyl phthalate has long been considered especially important. It is widely used as a plasticizer for vinyl chloride resins, a steadily growing end-market.

DIOP has also come in for closer scrutiny as a plasticizer and with the additional supply of 2-ethylhexanol available—meaning less fear of raw material shortages, which have occurred in the past when the plastics business was at its boom-ingest—more emphasis is likely.

The firm which has slated the expansion is already a manufacturer of plasticizers.

Ethylene Glycol — Canada purchased 4,052,863 pounds (at $110,296) of US-manufactured ethylene glycol in November. Of the eight other buyers, only two were relatively large. Japan took 274,220 pounds at $36,828, and Chile, 132,355 pounds at $13,963.

Total exports were 4,730,134 pounds, valued at $567,508.

Glycerine—US Department of Commerce statistics, relayed to OPD by the Glycerine Producers' Association, show that production of crude and synthetic glycerine amounted to 21 million pounds in December, down 3.2 million pounds from November and 3 million pounds from December, 1959, while output of all refined grades was 20.9 million pounds, off 8.7 percent from the preceding month.

At December's end, stocks of crude and synthetic held by producers totaled 26.2 million pounds, up 4 percent from November, and stocks of refined glycerine totaled 30 million pounds, up 6.8 percent from November.

Although the glycerine market domestically weakened in the closing days of 1960, reflecting the build-up of stocks here and the ample availability of the product worldwide, statisticians can delight in some figures just issued by the Business & Defense Services Administration.

Summing up the record for the first 8 months of 1960, the agency notes that August production, at 25.9 million pounds, was the highest on record; that 1960 is the first year to record monthly production of 25 million pounds and that 7 of the 8 months attained that level.

Imports of crude glycerine were 25 percent higher in the January-August period of 1960 (compared with '59), BDSA noted, while exports were up 5.3 percent.

Exports in November were 881,924 pounds, valued at $195,795, according to the Commerce department. Buyers included Canada (743,620 pounds at $156,073); Indonesia (68,058 pounds at $19,614);

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
130.51	130.50	130.58	132.80

For Current Prices see Page 10

Organic Chemicals Output: November

The following figures, in pounds, represent output of specified organic chemicals in October and November, 1960, as reported by the Tariff Commission.

	November	October
Acetic Acid:		
Synthetic	1,894,000	1,970,000
Natural (wood distillation)	1,894,000	1,970,000
Acetic anhydride	81,491,102	77,574,440
Acetone	61,782,915	58,114,205
Acrylonitrile	13,501,155	9,286,847
1.3 Butadiene (rubber grade)	139,444,866	157,155,529
Carbon disulfide	41,742,351	42,625,063
Carbon tetrachloride	31,538,444	31,105,780
Ethanolamines (Mono-, di-, and tri)	9,442,917	11,574,762
Ethyl acetate (85 percent)	7,102,566	6,705,874
Ethylene glycol	104,938,581	111,678,873
Formaldehyde (37 percent by weight)	*136,113,120	149,370,314
Methanol:		
Synthetic	166,337,454	167,557,384
Natural (wood distillation)	1,274,330	1,215,120
Pentaerythritol	5,178,249	5,626,271
Perchloroethylene	17,441,575	17,535,492
Propylene glycol	8,690,498	13,666,734
Trichloroethylene	29,488,550	28,309,289

* Partly estimated.

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Aliphatic Organics

Union of South Africa (44,377 pounds at $11,900); Venezuela (19,489 pounds at $6,084); Mexico, Nicaragua, and Japan.

Isoprene—Development of a through-process for producing isoprene—the route to "natural" synthetic rubber—is announced by a Japanese company. Its achievement is noteworthy because only one firm (US), reportedly, has so far succeeded in manufacturing isoprene on a commercial scale.

Currently operating a pilot plant with the capacity to turn out 5 kilos of isoprene daily, the Japanese company will go commercial as soon as requisite facilities can be built. It is said to contemplate an output goal of 40,000 tons a year.

Patent rights for the new process are being sought in Japan, in the US, France, Canada, Belguim and Britain. But, according to a published account, the firm has no intention of selling its processing rights to others.

A French process for manufacturing isoprene monomer has already been licensed to one company in the US and three others in Japan. Thus far, however, none of the licensees has disclosed plans for a full-scale commercialization of the process.

In the French method, isoprene monomer is manufactured from isobutylene and formaldehyde, with the advantage that feed hydrocarbon can contain as little as 10 percent isobutylene.

The process currently in commercial usage here, it's understood, involves the simultaneous dehydrogenation of butylene along with isoamylene—with butadiene as co-product, thus furnishing the raw material for polybutadiene, which can be used as an extended for polyisoprene.

Methanol——Trade reports continue to find demand for methanol strong. Open-market requirements for the chemical for solvent usage frequently are cited as one of the positive influences.

Although consumption of methanol in formaldehyde manufacture may have been lessened by the recession-feebled plywood business, the long-range outlook is nonetheless favorable as indicated by the 8-million-gallons-a-year methanol plant just brought on stream on the west coast by a major US chemicals producer.

A second firm—and the biggest US producer of methanol—is also expanding its capacity by 35 percent. This is a good clue to what's anticipated for the company's "Delrin" acetal resin.

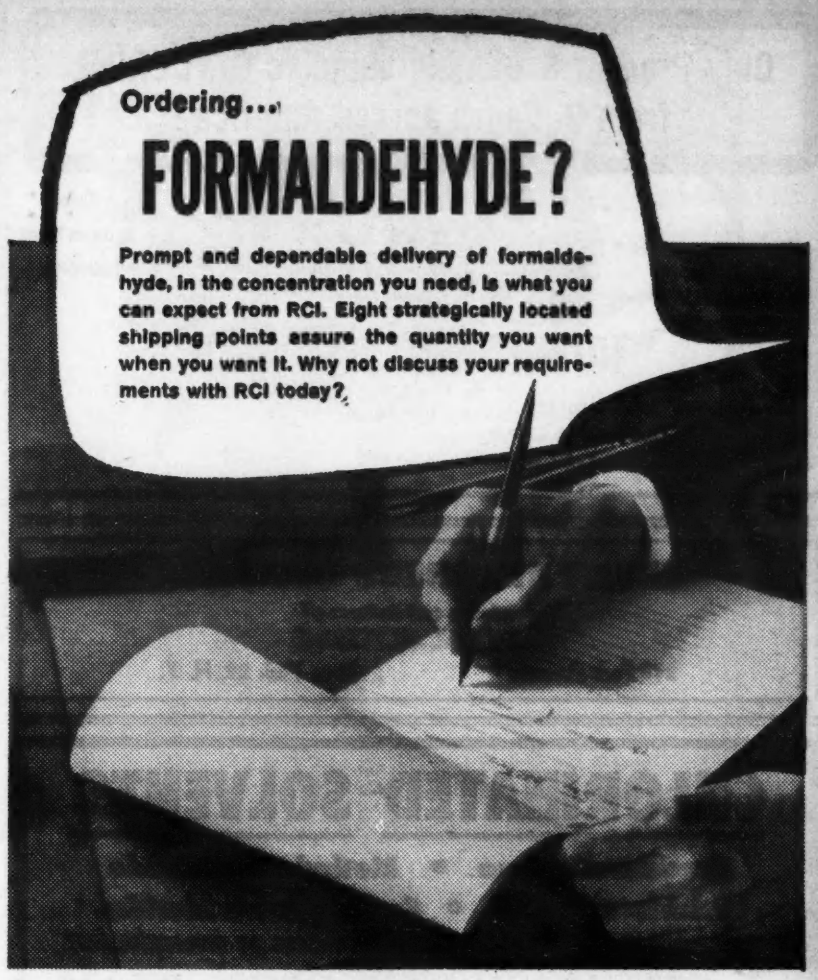
Price-wise, everything's stable, reportedly, with no changes looked for.

Molasses—Louisiana sugar cane mills ground 128,599 tons of cane during the week ended January 6, bringing the season's total to 6 million tons.

Unconfirmed reports, relayed to OPD by Agricultural Marketing Service, hold that 70 mills are grinding in Cuba at present and that yields are off an average of 2½ percent.

Hawaiian cane blackstrap production totaled 51,461,595 gallons in 1960, down from 60,848,779 in 1959. Off correspondingly, shipments to the US mainland amounted to 49,712,419 last year and 60,238,899 in '59.

Markets for feeding cane held steady at all major sales points with business reported fair to good in some areas and poor in others for the week ended January 24. The uncertainty of the Cuban situation along with a wait-and-see attitude regarding the US political situation seemed uppermost in the minds of many handlers and shippers, AMS said.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M&T Goes Commercial In Triphenylphosphorous

Metal & Thermit Corporation, Rahway, N. J., has made its first commercial shipment of triphenylphosphorous. Previously the material was supplied only in laboratory and development quantities.

Commercial availability of this intermediate is expected by M&T to renew interest in the Wittig reaction conversion of complex aldehydes for ketones to olefins.

Other suggested reactions include: halogenation to dihalide; oxydiation with peroxide to triphenylphosphorous oxide; addition of sulfur to form the sulfide, and reaction with active organic halides to give phosphonium salts.

'GRAS' List of Additives

—Continued from page 5

nicious anemia and thus to interfere with early diagnosis and treatment of this condition.

"It is the opinion of the commissioner that preparations of yeast, for use in dietary supplements, and which contain folic acid, are food additives requiring appropriate regulations prescribing the conditions under which they may be safely used," the FDA order states.

The other substance knocked from the list is "chlorophyll, extracted from plants without change in chemical structure." This substance was on the August 4 list.

It is being denied exemption because the extraction of chlorophyll from green plant tissue has been found to require a procedure whereby it is virtually impossible to remove chlorophyll in its natural state.

Since chlorophyll as such is not an article of commerce, FDA says, the presence of this compound in a list of substances generally recognized as safe for addition to food served no practical purpose.

IN BROADER FIELD: Richard L. Moore, formerly chemical public relations manager for W. R. Grace & Co., New York, named to higher overall position. His new title is director of public relations.

Celanese Starts Output Of Fire-Retardant Glycol

Celanese Chemical Company has started production of a new eater-glycol fluid that reportedly provides fire protection for industrial and military hydraulic systems.

The fluid, trade-named "Celluguard," is said to have excellent low-temperature properties and to be particularly well-suited for use in low-pressure hydraulic systems that do not require the heavy-duty properties of straight phosphate ester fluids.

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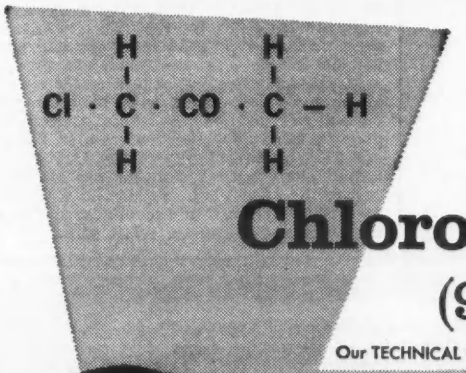

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See page 130—1961 Chemical Materials Catalog
See page 73—1961 Buyer's Guide Issue

Detergents: Chemical Makers Map The Raw Materials Trend to 1965

By 1965 the detergent industry, which consumed an estimated 1.6 billion pounds of synthetic organic chemicals last year, may be taking major quantities of chemicals not now considered as detergent raw materials—perhaps not even being marketed commercially today. The forecast, made by Lester D. Berger, jr., Union Carbide Chemicals Company, grows out of a panel discussion highlighting "New Trends in Detergent Technology" which was held during the annual convention of the American Association of Soap & Glycerine Producers in New York last fortnight.

Other industry developments that panel experts look for over the next few years include a continued trend to petroleum raw materials, substantial changes in hydrophobe technology of nonionics, sharpened interest in lime soap dispersants for liquid detergents and combination soap-detergent bars, and a larger relative volume of granular sodium tripolyphosphate to be produced as a detergent builder.

Production of nonionic surfactants is expected to increase from a total of close to 400 million pounds in 1960 to well over 500 million pounds by 1965, according to Mr. Berger, chemicals market development manager for Carbide.

In 1950 total production of all nonionics was about 70 million pounds and the most important was the polyethylene glycol fatty acid ester type.

By 1959 production had increased more than fivefold to 375 million pounds, of which 100 million pounds were fatty acid alkanolamides, about 50 million were polyethylene glycol fatty acid esters, and the balance—over 250 million pounds—consisted of products that were essentially small volume specialties ten years before.

Hydrophobe Technology Will Change

During the next four years the increase will be sparked by substantial changes in hydrophobe technology, better understanding of the relationship of chemical structure to performance, greater diversity of products, and a closer technical cooperation between the laboratories of basic raw materials suppliers and detergent manufacturers, Mr. Berger says.

Since big-volume ethylene oxide (1.44 billion pounds in 1960) forms a versatile and economic source of hydrophilic properties in a nonionic, Mr. Berger reasons that major changes in nonionic surfactant technology will continue to occur in the hydrophobe area.

"The growing interest in synthetic alcohols from oxo and polyolefin sources is one example of this trend," he says. "Polymeric hydrophobe structures based on polypropylene oxide are the basis of nonionics offered by two major suppliers, and these are growing in importance. Further extension of this area of polymeric hydrophobe technology is highly probable.

Over the next four years, as ever more diverse types of detergent products are developed for home and industrial markets, chemicals not now thought of as detergent raw materials will find use in this field.

"Already we know of nonionic organic chemicals, that are not basically surfactants, finding their way in increasing volumes into detergent products," the Carbide man points out.

Production of anionic surfactants, which totaled about three-fourths of total surfactant output in 1959, will continue to increase steadily, primarily through improvement of existing products and their wider application to specific end-uses.

Dr. R. D. Stayner, Oronite Division, California Chemical Company, says alkyl benzene sulfonates will remain dominant in the anionic group. Production of the latter type amounted to 531 million pounds in 1959, more than half total surfactant output.

Growth rate of the alkyl benzene sulfonates was comparable to that of synthetic detergents as a whole during the 1946-56 period, but leveled off in 1956-58, while syndets as a class were registering a 20 percent growth increase, Dr. Stayner reports.

He points out that one problem in connection with alkyl benzene sulfonates is their low sudsing ability at low concentrations. This brings about a need for booster additives at an increase in cost.

Trideoyl benzene sulfonates in soft, warm water have been found to reduce the need for foam boosters of the amide type.

"In tests on cotton swatches, half the concentration of tridecyl benzene sulfonate detergent is required as is needed when using the dodecylbenzene sulfonate type," Dr. Stayner says.

In hard water, dodecyl and tridecylbenzene types are equal in performance. In light duty detergents, the tridecylbenzene shows a modest improvement over other types.

The development of biologically soft detergent products will take up a good part of researchers' time during the next few years.

"With more than 500 million pounds of detergent alkylate capacity on hand, it is extremely likely that manufacturers will develop biologically soft materials at a reasonable price," Dr. Stayner says.

Speaking on phosphate builders, Dr. John R. Van Wazer, director of the fundamental research institute, Monsanto Chemical Company, sees no big-volume detergent builder on the horizon to challenge the sodium phosphates, in particular sodium tripolyphosphate.

Sodium Tripoly Tops in Builders

Production of sodium tripoly, which amounted to 607 million pounds in 1950, will probably top 1.5 billion pounds this year, according to Dr. Van Wazer. Tetrasodium pyrophosphate is also being used in good volume.

For phosphate builders Dr. Van Wazer predicts more varieties and larger relative volume of granular sodium tripolyphosphate will be produced; there will be increased use of builders in general purpose liquid and in tableted detergents, and a nearly pure high-temperature form of sodium tripolyphosphate may be made commercially.

Among the newer uses of granular material, Dr. Van Wazer singles out admixed solid formulations, tableted and film-coated detergents, small-size crutching operations and packaged water softeners as promising markets for the early sixties.

"A pure high-temperature form of sodium tripolyphosphate means complete hydration resulting in more water in the product and shorter crutching time," Dr. Van Wazer points out.

Although commercial production of such a form may be possible, he reports there is no likelihood that it will happen in the next year or two.

The trend to combination soap-detergent bars and all purpose liquid detergents has sharpened interest in lime soap dispersants, according to Dr. R. L. Mayhew, man-

—Continued on page 43

SURFACTANT PRODUCTION

1960 . . .	*1.600 billion lbs.
1959 . . .	1.504 billion lbs.
1958 . . .	1.355 billion lbs.
1957 . . .	1.206 billion lbs.
1956 . . .	1.148 billion lbs.
1955 . . .	1.153 billion lbs.
1954 . . .	1.026 billion lbs.
1953 . . .	921 million lbs.
1952 . . .	741 million lbs.
1951 . . .	693 million lbs.

*Estimate

Source: Tariff Commission

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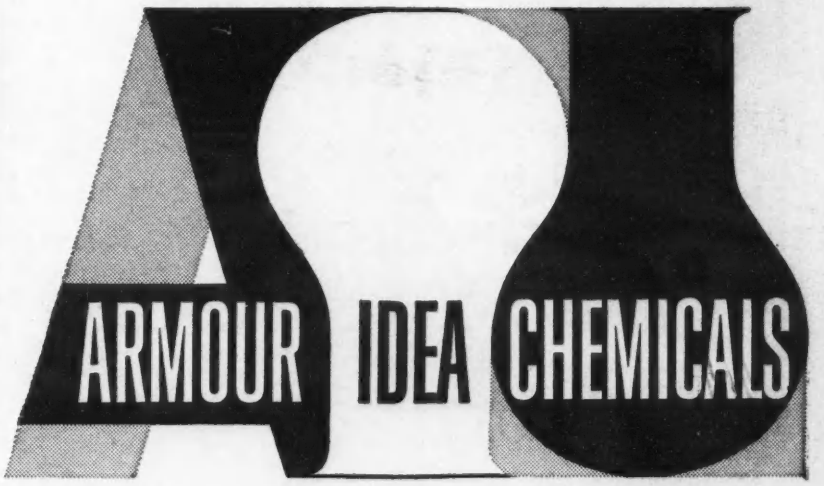

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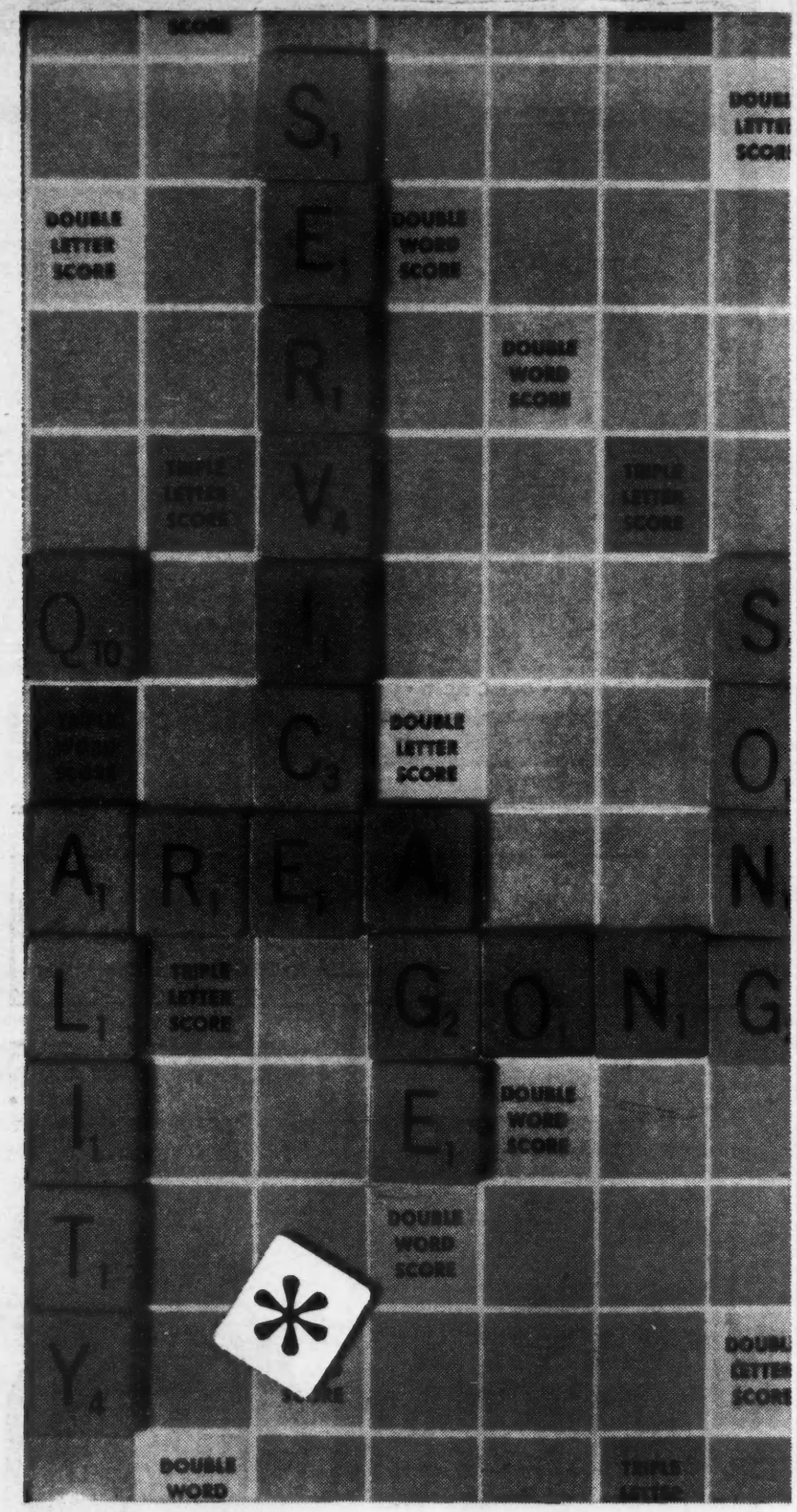

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KOPPERS COAL CHEMICALS

Coal Chemicals

Production of selected coal chemicals in November generally fell off from October's volume according to US Tariff Commission reports. Losses in declining chemicals tended to be wider than the gains achieved by advancing products and occurred unfortunately for the most part in chemicals already in short supply. Trade sources predict December reports will show even further reduced supply due to the full effects of lagging steel rate and year-end holiday production schedules.

Among chemicals in November which dropped off from the previous month's output were—

Styrene monomer—down 17.6 million pounds from October's adjusted production figure.

Naphthalene — down 4.5 million pounds.

Phthalic anhydride—down 3.4 million pounds.

Cresylic Acid — down 1.5 million pounds.

Monochlorobenzene—down 1 million pounds.

Benzene—down 900,000 gallons.

Significant increases in November from the preceding month were noted in—

Dodecylbenzene—11.2 million pounds.

Phenol, tech and USP—2.8 million pounds.

Xylene—1 million gallons.

Creosote oil—1 million gallons.

A major dye producer's January price list reveals quotation changes ranging the spectrum of colors. Nine advances and one decline are noted. Increases range from 7 to 25 cents a pound while the sole decrease is posted at 2 cents a pound.

Production of steel for the week ended January 28 was 1,466,000 tons, a decrease of 2.2 percent from the preceding week.

Index of production for the week was 78.7, as compared with 80.5 in the preceding week.

Production for the year through January 28 was 46.6 percent behind the same period in 1960.

Based on assumed 1961 steel capacity, production for the week ended January 28 was 51.5 percent of capacity.

Price Trends

Advanced

Fast blue SR, C.I. 13390, 14c. per lb.
Rubine XX, conc., C.I. 14720, 17c. per lb.
Fast red A, conc., C.I. 15620, 16c. per lb.
Phloxine 2G, C.I. 18050, 11c. per lb.
Blue black, extra conc., C.I. 20470, 7c. per lb.
Brown MCW, C.I. 22311, 12c. per lb.
Yellow brown K, extra, C.I. 30045, 13c. per lb.
Blue GXX, C. I. 52015, 21c. per lb.
Jade green NC, supra double paste, C.I. 59825, 25c. per lb.

Reduced

Blue 2B, extra conc., C.I. 22610, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
117.52	117.45	117.46	118.40

For Current Prices see Page 10

Basic Products

Benzene—Reports that 50,000 metric tons of benzene from the USSR have been purchased for 1961 delivery by a US company for $80 a ton were denied last week by two major chemical companies, one of which has been a volume importer of Soviet material in the past.

The $80 a ton figure works out to be 26.3c. a gallon, close to the price paid by the chemical company in its previous contract with the Soviets.

Other sources queried about the report, however, greeted the $80 price dubiously, pointing out that the Soviets are selling benzene in Europe for a much higher figure, closer to US domestic prices in fact.

At week's end unconfirmed reports circulated in the trade indicating that the contracted material is actually priced at $96 a ton, or 31.7c. a gallon, and is not in as high a volume as originally reported.

Current US market remains tightly supplied in the face of strong demand and reduced cokeoven supplies. Petroleum production has been stepped up but is not yet able to bridge the gap between supply and demand.

Cokeoven operators in November turned out 8,505,701 gallons, or 23.5 percent of the 36,248,583 gallons monthly total.

This represents a loss of 300,000 gallons from October cokeoven production. Tar distillers reported no benzene output for the month.

Sustaining a high rate of production, petroleum producers supplied 27,742,782 gallons in November, or 76.5 percent of all available material.

Representing the second highest monthly volume of 1960, petroleum production in November ranked behind only October output of 28.1 million gallons.

Benzene total for the first eleven months of 1960 is 414 million gallons, some 128 million gallons ahead of the 286 million turned out in the like period of 1959.

m,p-Cresol—Sources report material is moving well.

Xylenols are currently inactive. Accumulation of suppliers' inventories is ruled out by cokeoven slowdowns, however.

Prices are unchanged.

Naphthalene—Trade sources term the supply situation as critical.

November production dipped to 32.5 million pounds, some 3.4 million below October's volume.

Observers say December's output will be considerably lower when figures are revealed. Holiday steel schedules and lower steel operating rates in general are to blame.

No relief is in sight from cokeovens. After a flurry of activity in the first fortnight of January, the pace slackened and last week steel output fell behind the preceding week's totals.

Optimistic estimates place steel recovery three months away while more conservative views say six months, or just about the time petroleum naphthalene units start coming on stream.

Phenol—Mixed success of January phenol sales are reported.

One large producer claimed January sales exceeded expectations.

Another supplier remarks that pre-January 1 stock building had cut into sales although the effects were beginning to wear off.

USP and technical grade phenol production climbed to an estimated 63.8 million

Aromatic Chemicals Output: November

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

	November 1960	November 1959	First Eleven Months 1960	First Eleven Months 1959
Aniline ....lbs.	9,839,258	10,019,800	111,506,966	120,805,527
Benzene ....gals.	36,248,483	26,821,552	414,076,391	286,274,325
Creosote, oil ....gals.	6,546,786	6,370,894	80,921,470	80,028,331
Cresols, m-p and o-m-p fractions....lbs.	3,776,042	2,435,735	44,395,651	30,260,829
Cresylic acid, refined all sources....lbs.	4,141,273	6,445,109	52,756,015	42,643,872
Dodecylbenzene ....lbs.	40,615,290	44,968,047	435,423,756	446,854,775
Monochlorobenzene ....lbs.	46,088,222	47,105,754	543,062,876	493,893,893
Naphthalene, crude ....lbs.	32,517,279	25,313,511	467,324,954	361,476,920
Phenol, tech. and USP....lbs.	63,810,766*	64,207,620	682,536,184	606,037,420
Phthalic anhydride ....lbs.	26,519,673	17,481,148	345,966,876	318,858,159
Styrene monomer ....lbs.	131,326,788	137,925,850	1,511,539,610	1,307,129,452
Toluene ....gals.	25,811,645	21,172,789	251,734,372	222,645,931
Xylene ....gals.	28,166,967	21,233,936	293,605,062	204,628,196

Source: Tariff Commission.
* Partly estimated.

Coal Chemicals

pounds in November, a rise of 2.8 million pounds from October.

Output for the first eleven months of 1960 was 682.5 million pounds, far ahead of the 606 million pounds turned out in the like period of 1959.

Dyes

Nine price advances and one decline have been announced by major dye producer.

Advanced are:

Fast blue SR, C.I. 13390, up 14c. to $1.57 a pound.

Rubine XX, conc., C.I. 14720, up 17c. to $1.76 a pound.

Fast red A, conc., C.I. 15620, up 16c. to $1.61 a pound.

Coal Chemicals*

Estimated output of coal chemicals recovered from cokeoven operations during the week ended January 28, were as follows:

Ammonia liquor	lbs.	462,508
Ammonium sulfate	lbs.	19,453,567
Benzene	gals.	1,875,972
Coaltar	gals.	10,353,598
Crude chemical oil	gals.	299,813
Solvent naphtha	gals.	59,963
Toluene	gals.	419,738
Xylene	gals.	119,925

* Based temporarily on 1960 theoretical capacity.

Phloxine 2G, C.I. 18050, up 11c. to $1.16 a pound.

Blue black, extra conc., C.I. 20470, up 7c. to $1.51 a pound.

Brown MCW, C.I. 22311, up 12c. to $1.59 a pound.

Yellow brown K, extra, C.I. 30045, up 13c. to $1.45 a pound.

Blue GXX, C.I. 52015, up 21c. to $2.54.

Jade green NC, supra double paste, C.I. 59825, up 25c. to $1.75 a pound.

Declined:

Blue 2B, extra conc., C.I. 22610, down 2c. to $1.51.

Vat green 1, C.I. 59825—Production in November dropped to 194,485 pounds after registering 203,256 pounds in October.

Intermediates

Phthalic Anhydride—Shortage of naphthalene is cutting into availability of phthalic.

Demand remains good with little excess material reported in produers' hands. At least one supplier is allocating phthalic.

Declining naphthalene supply cut November's phthalic production to 26.5 million pounds after an October figure close to 30 million pounds.

First eleven months of 1960 show phthalic output at 346 million pounds, only 28 million ahead of the 1959 pace.

Salicylic Acid—Technical grade material is reported moving into the usual channels of medicinal, dye and rubber curing applications in undiminished volume.

Prices are stable with material in drums, carlot or truckload amounts, delivered, at 40½c. a pound while lesser amounts are posted at 44¾c.

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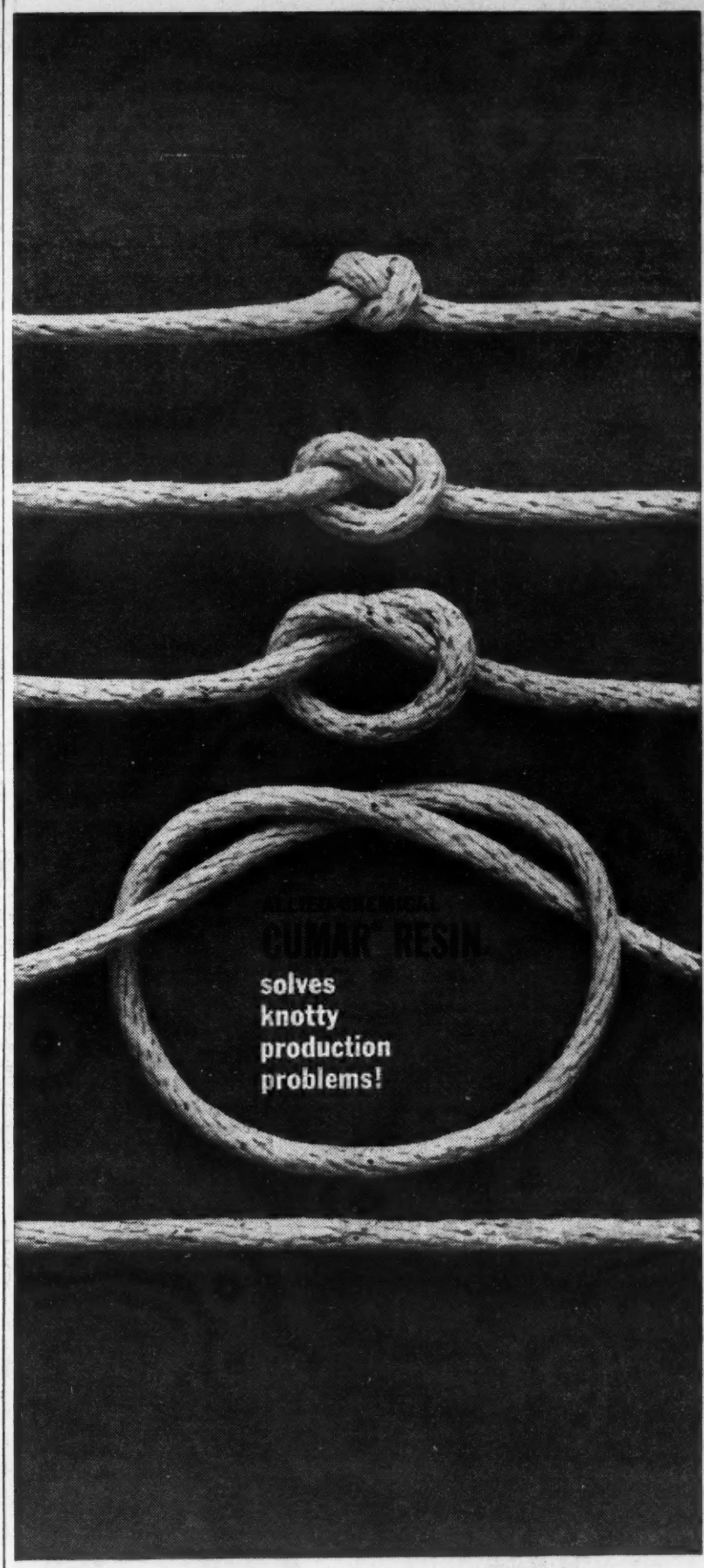

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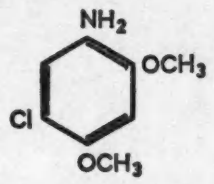

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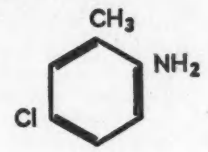

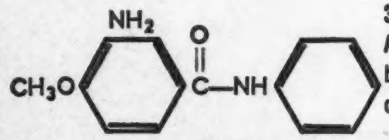

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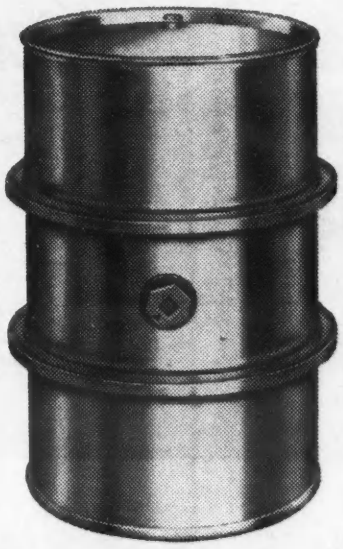

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US Rubber Making Bid For Bigger Missile Role

United States Rubber Company expects to increase its participation in missile development and production, and to help its expectations along, the company has organized a new rocket motor group.

The group will concentrate on business developments in the rocket and missiles field and the execution of government contracts, supplementing the work of the company's operating divisions and government department

Christy H. Madsen, who is now product manager of rubber and chemicals in the Naugatuck Chemical Division, has been appointed coordinator of the rocket motors group.

Others members will be:

Paul Blunt, now the government contact member of Naugatuck's commercial development department; Raymond A. Herrly, coordinator of new products and processes in the footwear and general products division, and Dr. Ernest J. Joss, coordinator of military research contracts for the parent company's research center in Wayne, N. J.

FDA Eases Additives Policy

—Continued from page 4

tives in food fats and fatty foods to retard rancidity.

The proposed standards of FDA require that the label of the preservative itself declare the specific chemical ingredient or ingredients from which it is made. The labeling of fabricated foods in which the preservative is used, however, may declare the presence of the preservative by its standardized name without listing the specific chemical.

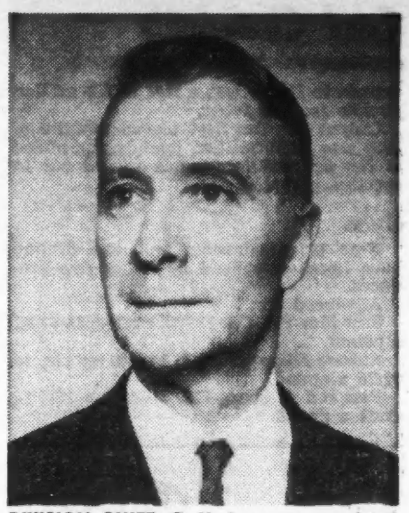
An acceptable label statement for a fabricated food containing the added preservative would be "fat preservative added" or "fat antioxidant present to retard rancidity."

Commissioner George P. Larrick says one of the major purposes of the proposed order is to require, on preserved fats and foods containing such fats, labeling that will be informative to the consumer.

"There has been much consumer confusion and misunderstanding because of the declaration by chemical name of the presence of such preservatives," he added.

"Adoption of the standard of identify will clarify consumer understanding in this area and will promote honesty and fair dealing."

Interested persons have been invited to submit their views on the proposed standard, in writing, by February 26.



DIVISION CHIEF: S. H. Longman, appointed general manager of the Advance Solvents & Chemical Division of Carlisle Chemical Works, Inc., New Brunswick, N.J.

General Aniline Sale Bill Introduced in the Senate

Will General Aniline & Film Corporation finally revert to private enterprise? Sen. Kenneth B. Keating of New York has just introduced a bill in congress which would permit sale of the government-held GAF.

The New York-based firm has been snarled in litigation ever since the government tried to unload it after World War II. GAF was seized by the US from Germany during the war. Interhandel, a Swiss concern, claims a share in the $120-million company.

Under the Keating bill, proceeds from the company's sales would be held in escrow until the litigation is settled. Similar bills were introduced in the house in January.

Ribicoff, Flemming

—Continued from page 3

date of the law for any additive which was undergoing tests for safety prior to March 6, 1960, but which tests cannot be completed before March 6, 1961, providing that the testing work is being "pursued with reasonable diligence" and the secretary is kept informed on the progress of this work.

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Trade Name Chemicals

—Continued from page 39

ager of technical service and development, Antara Chemicals, sales division of General Aniline & Film Corporation.

Production of all-purpose liquid detergents last year is estimated at 170 million pounds and the market is expected to grow to 290 million pounds by 1965. Combination soap-detergent bars are currently figured to be about 20 percent of the total bar soap market, or about 100 million pounds.

Growth markets such as these will result in greatly increased interest in those surfactants which have lime soap dispersing properties, Dr. Mayhew feels.

"It has long been recognized that the addition of surfactants to soap will prevent the formation of large agglomerates of calcium and magnesium soap, producing instead a fine dispersion of the lime soap formed. In this finely dispersed form the lime soap is much more easily rinsed from most surfaces."

Rise in Textile Softeners

Donald L. Andersen, General Mills, Inc., cites rising demand for textile softeners as a big factor in increased interest in quaternary ammonium compounds.

Mr. Andersen points out that there are numerous difatty quaternary-based home laundry softeners on the market.

"Quaternary softeners have found wide acceptance in commercial and institutional laundries. In addition, quaternary ammonium compounds are widely used in the textile processing industry as auxiliary softeners in conjunction with normally harsh finishing agents, such as antistatic agents and glass fiber lubricants.

"Currently, they are of interest for their possible mildew-resisting, mothproofing, and germicidal properties in conjunction with softness as a finishing agent.

"The combination household laundry detergent-clothes softener- disinfectant is a gleam in many a researcher's eye. There is little question that a tremendous market exists for the successful formulation.

"Amphoteric surfactants compete with conventional surfactants only in the broadest sense. I think it is more correct to say that they are adjuncts to conventional products or to be used to perform tasks possible only because of the amphoteric structure."

Chemical Men Getting

—Continued from page 5

experience are methyl alcohol, and carbon tetrachloride.

Such substances that have, by human experience, been demonstrated to cause serious injuries, shall be considered highly toxic under the new law even though not meeting the animal test prescribed in the act, and must bear the labeling specified for highly toxic substances.

The federal caustic poison act remains in full force and effect during the extension as to any article affected by the extension.

Food & Drug Administration urges manufacturers to utilize the time between now and August 1 to bring their products into full compliance with the act. A number of manufacturers already have taken steps to comply with the new law, according to the agency.

The new act will be implemented through a combination of regulatory and educational activities. Voluntary compliance will be sought in every way possible.

Public health Service estimates that every year 600,000 children swallow aids left within their reach and about 500 die as a result of such acts. There are a quarter of a million different brand-name household chemical products available for the pantry, medicine cabinet, basement, garage and elsewhere around the home.

The new law provides for cautionary labeling, together with information as to the composition of these products, a statement of the principal hazard or hazards, precautionary measures to be taken, instructions, when necessary, for emergency treatment in case of misuse and instructions to keep the articles out of the reach of children.

The required warning labeling must be prominently and conspicuously placed on the containers under the new law FDA says.

AEC to Purchase Uranium Directly from South Africa

Atomic Energy Commission has revised its uranium concentrate purchase program with South Africa. Under terms of a contract to be executed shortly between the commission and the South Africa Atomic Energy Board, the US will purchase 18,900 tons of U_3O_8 between January 1, 1961 and December 31, 1966.

Previously South African Uranium was procured by the Combined Development Agency—principally a joint US-United Kingdom procurement agency.

The new contract with South Africa incorporates changes in the concentrate pricing arrangement and delivery schedules, but calls for an identical quantity of uranium concentrates.

The contract will be at a fixed price averaging approximately $11.20 per pound, f.o.b. vessel, Durban, South Africa, which is about 60 cents less than the price paid during the last year under the CDA formula arrangement.

ADM Chemical Unit

—Continued from page 5

istrator will be Hall Dillon, who will also report to Mr. Nelson. Dr. Dillon was previously sales coordinator for the resin division.

The new organization, designed after extensive interviews with ADM's chemical customers, has been designed to concentrate research production, service and sales efforts on their specific needs and wants, an official of the Minneapolis, Minn., company says.

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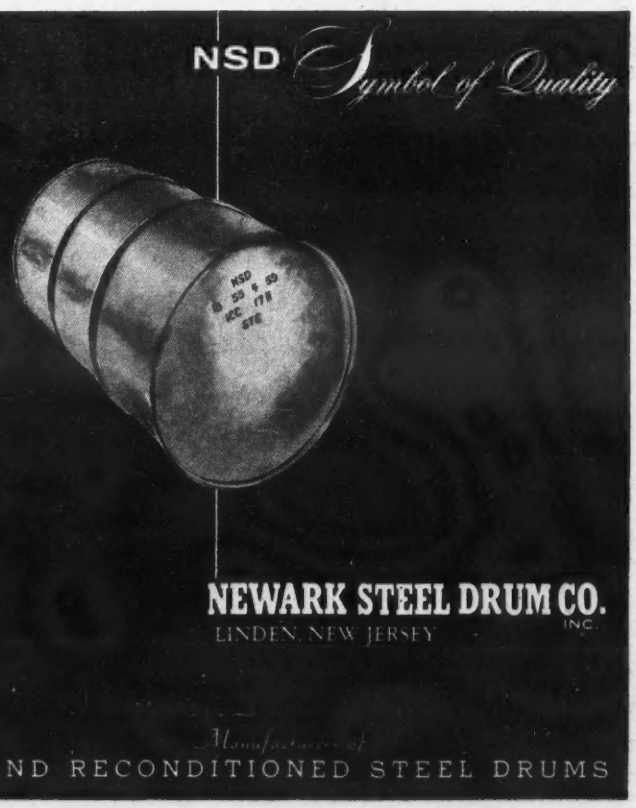

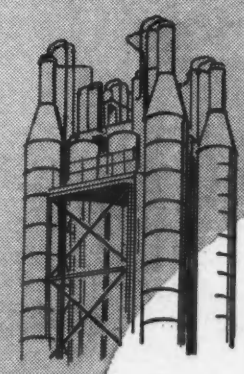

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Drugs, Fine Chemicals

If competition is the life of trade, the drug and fine chemicals industry is lively indeed. Domestic manufacturers and importers alike are beating the bushes for business, but finding to their chagrin, little change in the buying mood or policy despite the new year, the new administration, and the impetus expected from projected greater government spending and other "put America back to work" measures. As one trade member puts it, "our customers are purchasing smaller quantities at more frequent intervals"—which frankly isn't a dumb thing to do because tomorrow's prices may be lower than today's, a particularly likely occurrence at present with every marketer pushing to get whatever business is available.

Short-term, small-lot buying is in itself a deterrent to price stability of course, for it involves the renegotiating of prices each time round. And with really adequate stocks in the warehouse, producers are at a decided disadvantage when it comes to holding up their side of the haggling.

Importers, who are blamed for many things even as their US counterparts abroad are, are not without their own brand of ills, the hardest to take being the narrowing profit margins. What has happened? Well, one thing is higher replacement costs. A second is the increasing number of people who are either getting into the import business for the first time or broadening their existing line of products. And third—and perhaps most important—the low, low prices on domestic goods.

It's understood that importers of vitamins are having a particularaly hard time of it, one or two indicating, in fact, that they're no longer concentrating on this phase of business. There's also speculation that some suppliers of foreign manufactured B_{12} are going to face a real financial problem if the recently boosted duty on the vitamin—as a result of reclassifying B_{12} as a coaltar derivative—is made retroactive.

Brucine—The marketing of a synthetic denaturant for alcohol, called "Bitrix," has not impeded sales of brucine, according to several reports from the trade, but it has, with the additional quantity of the alkaloid available since the final quarter of '60, caused prices to drop quite a bit lower. A good-size lot of the sulfate, for example, could be purchased today, reportedly, for about $1 an ounce.

Camphor—A recent fire at its New Jersey plant has interfered with operations, spokesman for the only US producer of synthetic camphor reports, adding, however, that it will soon begin shipments of 1-ounce tablets—in round rather than square form—as a temporary measure until all is normal again. This is likely in about three weeks.

Meanwhile, imports of refined camphor from Formosa (Taiwan) are under investigation by the Bureau of Customs.

A complaint lodged with the agency alleges that the product is being sold here at less than its "fair value" in violation of the antidumping law.

Domestic camphor prices were reduced twice within the final quarter last year, and the second reduction inspired some tough language: "Foreign producers seem determined to dominate the industry . . ."

Chloramphenicol—Food & Drug Administration has ordered changes and additions in the labeling of chloramphenicol, which is marketed by a leading drug firm as "Chloromycetin."

FDA acted upon the recommendation of the National Research Council, to whom the agency had appealed following reports of blood disorders associated with the increasing use of the drug.

The new labeling requirements, it's assumed, are intended to eliminate the major objection to the use of the drug: its employment where other equally effective drugs could be used with less danger.

The manufacturer of "Chloromycetin" is reported cooperating with FDA in relabeling the drug as recommended.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
59.27	59.27	59.27	60.22

For Current Prices see page 10

Gelatin—Gelatin producers began 1961 with an inventory of 12,714,000 pounds. This compared with 11,955,000 pounds on December 1 and 11,235,000 pounds at the start of '60.

Build-up of stock resulted from the December rise in production that was not matched by a like gain in sales. Not all grades of gelatin participated in the overall trend, however, as the figures below show.

Total production of gelatin in December was 5,243,000 pounds, up from 5,167,000 in November and 4,994,000 in December 1959. Of the total, 4,599,000 pounds were manufactured from hides while the remainder (644,000 pounds) was osseinderived.

Classified by type, output was, in thousands of pounds (November production in parenthesis): edible 3,963 (3,722); technical 262 (272); pharmaceutical 254 (352); and photographic 764 (821).

December shipments amounted to 4,484,000 pounds, up slightly from November's 4,307,000 pounds but appreciably below the December 1959 figure of 5,372,000 pounds.

By type, shipments were, in thousands of pounds: edible 3,228 (3,164); technical 152 (206); pharmaceutical 288 (256); and photographic 816 (681).

Stocks at month's end, totaling 12,714,000 pounds, were comprised of (in thousands of pounds): edible 7,267; technical 1,010; pharmaceutical 1,185; and photographic 3,252.

Guar Gum—An Indian firm wishes to arrange a joint venture with a US partner for the manufacture of guar gum. Machinery and technical know-how are sought for the product.

Shree Madhav Mills, Pvt., Ltd., reportedly owns property in Rajasthan for setting up a guar gum manufacturing plant and marketing facilities to purchase the raw materials. The firm believes a large and growing market exists in the US for the gum.

Inquiries should be sent to Shree Madhav Mills, Pvt., Ltd., P.O. Patna, Bihar, India. (Foreign Commerce Weekly.)

Menthol—Although a few odd lots of Brazilian menthol may be selling at about $8.10 a pound, spot prices of $8.25 on the regular crystals and $8.40 on the large crystals are generally regarded as representative of most trades.

Relatively high, this schedule is still below that quoted during the past year. But rather than any decline in consump-

Drugs and Fine Chemicals Output: November

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		November	October
Acetylsalicylic acid	lbs.	2,022,033	1,666,782
Ascorbic acid and salts	lbs.	—	569,578
Dihydrostreptomycin	gms.	—	—
Niacin and amide	lbs.	149,173	181,936
Penicillin salts	million-units	54,575,342	38,031,833
Phenobarbital	lbs.	*27,738	32,849
Pyridoxine	lbs.	5,621	—
Streptomycin	gms.	24,322,692	20,692,581
Sulfa drugs	lbs.	386,259	477,264
Tetracycline	gms.	—	—
Thiamin derivatives	lbs.	31,761	—

A dash (—) indicates data not reported.
* Partly estimated.

Drugs, Fine Chemicals

tion, the drop-off reflects a hold-off of purchases on the part of end-users, pending the arrival of the new Brazilian crop which should be available here very soon. The fact of the additional supply has also had an influence on prices, of course.

Formosan menthol, which has been coming in here in appreciably larger quantities than formerly, is commanding prices comparable to those being charged for the Brazilian. Jap material, which is a slow mover at the best and worst of times, is bringing as little as $10.50—on quantity—and as much as $12.

Reserpine—A major drug house reported last week that it had derived a potent, fast-acting sedative from reserpine. Occasioning the announcement was the thirteenth annual scientific conference of the American Chemical Society's North Jersey section.

A company spokesman stated that the new sedative—not yet on the market—achieves its calming effect within 30 minutes, in contrast to the hours or days sometimes required for reserpine. It does not lower blood pressure, accumulate in the body or have other side effects of reserpine according to the results of tests to date, he added.

Botanicals

Chamomile Flowers—Hungarian chamomile is selling at 85c. to $1 a pound; inquiry is good. Less active, Roman chamomile is listed at $1.50 to $1.75.

Papain—In good demand, papain is selling at anywhere from $5.50 to $10 a pound, the big spread representative of quality and quantity differences.

Seven lots (140 crates, 10 drums) of papain were detained by the Food & Drug Administration at the Port of New York during the two week period ended January 13.

Tolu Balsam—Prices are reported inching upwards because of the small stocks held by dealers here. Top of the range is thought to be about $3.95 a pound, the low $3.60.

Water-Soluble Gums—Analysing the figures for the first eight months of 1960, Business and Defense Services Administration reports that imports of arabic, karaya and locust bean gums declined from comparable levels in 1959 by 24.5, 4.5 and 31.5 percent, respectively.

The Commerce department agency notes, however, that tragacanth imports were up 61 percent.

Apparently, the tragacanth market is still strong, if not stronger. Indications are that prices are going up.

Arabic gum was exceptionally firm until the latter part of last year, when prices started to slide. Amber sorts are currently quoted at a range of 21c. to 23c. a pound. New crop will be coming in shortly.

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Obituaries

Clarence E. McKay

Clarence E. McKay, sales manager for turpentine in the naval stores department of Hercules Powder Company, died January 26 in Wilmington, Del. He was sixty-three years old.

After serving as a clerk in the accounting department, Mr. McKay joined the company's sales staff in 1926 and became sales supervisor of the naval stores unit in 1942. Before his most recent assignment he served eight years as sales manager of terpene chemicals.

Walter E. Gotham, former vice-president in charge of manufacturing for Nuodex Products Company, Elizabeth, N.J., died January 28 in Summit, N.J. He was sixty-seven years old.

Chester Naramore, who headed the petroleum division of the Bureau of Mines during World War I, died January 29 in San Jose, Calif. He was eighty-one years old.

Orson Benjamin Newton, jr., vice-president and sales manager of C. B. Fleet Company, died January 25 in Lynchburg, Va.

Martin Sain, founder of major oil combines in Rumania and Portugal died Feb. 2 in Estoril, Spain. He was seventy-six years old.

Harry Stenerson, senior associate editor of American Chemical Society's applied publications, died February 1 in Bronx, N. Y. He was sixty-four. Mr. Stenerson became an assistant editor for ACS in 1944, having previously been on the editorial staff of the *Journal of Commerce*. He was later made industrial editor, and in 1946 became an associate editor. He was named a senior associate editor last year.

Flintkote Signs Contract For Newfoundland Gypsum

Flintkote Company, New York, has been granted a 99-year renewable lease on about 3,000 square miles of gypsum-rich land in Newfoundland. Arrangements for the lease were completed last week by Flintkote and the government of the Canadian province.

A spokesman for Flintkote says the company is now in a position to utilize the Newfoundland deposits to supply, as the market warrants, new gypsum producing plants in the US and Canada. The first of the company's new gypsum units is slated for immediate construction in the New York metropolitan area. Exact site of this facility will be announced in the near future, the spokesman says.

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- BERYLLIUM SILICATE
- BERYLLIUM SULFATE
- BIALLYL
- BILIVERDIN
- α,α'-BIPIPERIDYL
- α,α'-BIQUINOLYL
- BISMUTH CHROMATE
- BISMUTH IODOGALLATE
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Petroleum Derivatives

Heavy sustained demand for aromatic solvents keeps petroleum producers turning out BTX at breakneck pace. Latest Tariff Commission report, compiled for November, attributes petroleum suppliers with 27.7 million gallons of benzene, or 76.5 percent of the month's volume, 23.7 million gallons of toluene, 91.3 percent of all material, and 27.6 million gallons of xylene, or 97.9 percent of available supply.

Cokeoven supplies of solvents continues restricted by low steel operating rates. Providing a marketing advantage to petroleum suppliers, the cokeoven slowdown does necessarily affect a hardship on buyers.

Overall benzene supply is described as tight by trade sources while toluene shows signs of snugness in certain areas, namely the Gulf export market. Xylene supplies are deemed adequate with isomer demand outstripping solvent application.

Crude oil production and runs to stills increased in the week ended January 20.

Crude output rose to 7,216,000 bbls., up 65,000 bbls. from the preceding week.

Daily average crude runs to stills were 8,357,000 bbls., 15,000 bbls. higher than in the preceding week.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 6, 1960
103.74	103.74	103.74	103.64

For Current Prices see Page 10

Aromatic Solvents

Benzene—Reports that 50,000 metric tons of Communist benzene have been contracted for by a US chemical firm for delivery this year at a price of $80 a ton were denied last week by two major companies, one of which has been involved in Soviet trade in the past.

Although the $80 a ton price works out to be 26.3c. a gallon, approximately the contract figure involved in a recently terminated Soviet benzene deal, trade sources are dubious that large volume material would currently be imported into the US at that price.

Pointing out that European prices for benzene are as high as domestic US market levels, veteran observers remark that on the surface the $80 a ton price appears unrealistic.

At week's end unconfirmed reports circulated that the contracted material is actually priced at $96 a ton, or 31.7c. a gallon, and is not in as high a volume as originally indicated.

The identity of the contracting US company remains unknown.

Continuing their high rate of production, petroleum suppliers in November turned out 27,742,782 gallons, or 76.5 percent of all available material.

This represents the second highest monthly volume of 1960, ranking only behind October's 28.1 million gallons.

Cokeoven operators supplied 8,505,701 gallons, or 23.5 percent of all material. No benzene was reported from tar distillers.

Total output for November was 36,248,583 gallons, some 900,000 gallons higher than in October and 9.4 million gallons higher than in strike-bound November 1959.

Churning out 414 million gallons in the first eleven months of 1960, producers are 128 million gallons ahead of the pace set in the same period of 1959 of 286 million gallons.

Toluene—Supply is tightening up, producers report.

One result has been an upward movement of export prices in the Gulf.

In the domestic market supplies to meet needs are reported on hand but not in depth.

Strong demand is resulting in good sales volume although buyers are gaining advantages in areas where petroleum and cokeoven sources are competing for markets.

Quoted petroleum price remains 25c. a gallon, f.o.b., freight equalized while coal-tar toluene is scheduled at 25½c. a gallon, delivered East of the Rockies.

In practice, however, competition for volume markets is forcing price adjustments.

Toluene production in November rose to 25,811,645 gallons, up half a million gallons from October's adjusted output of 25,313,089 gallons.

Petroleum producers accounted for 23,653,254 gallons, or 91.3 percent of all supply, while cokeoven operators turned out 2,158,391 gallons, or 8.7 percent.

No supply was reported from tar distillers.

Petroleum toluene output in November was 600,000 gallons ahead of October while cokeoven material was in about the same volume.

Total toluene production for the first eleven months of 1960 figures at 251.7 million gallons, as compared with 222.6 million in the same period of 1959.

Xylene—Demand for xylene for solvent purposes is down as is solvent demand generally.

Chemical uses are strong with calls for ortho and para isomers running well.

Supply situation is reported fair although some producers have noted a tightening up, probably based on heavy fraction demand.

Domestic production continues high. November output hit 28,166,967 gallons, all but 591,317 gallons of which came from petroleum operators.

Compared to October's volume this represents a gain of approximately a million gallons, nearly all of which is attributed to increased petroleum output.

Volume for the first eleven months of 1960 was 293.6 million gallons, well ahead of the 204.6 million turned out in the like period of 1959.

Ten Years Ago—For those who think prices have nowhere to go but up, here are some representative solvent prices listed in OPD, February 5, 1951: Benzene, 30c. to 37c. a gallon; petroleum xylene, 31c. to 33c. a gallon; coaltar xylene, 25c. (one posting) to 35c. a gallon; coaltar toluene, 26c. (one posting) to 33½c. a gallon, and petroleum toluene, 31c. to 33c. a gallon.

Aliphatic Solvents

Mineral Spirits—Odorless spirits are reported picking up in volume as cold weather cancels much outdoor painting and stimulates indoor applications.

Regular spirits still move in greater volume due to lower price range, however.

Despite some reports that paint materials are moving on a hand to mouth basis, spirits continue to sell well according to producers.

Prices remain stable and unchanged from longterm levels. With the first of the year having past without an increase it is more than likely no price hike will occur in the near future.

LPG's

Production of lpg's in the first two weeks of January declined to 367,976,000 gallons after registering 428,303,000 gallons in the last fortnight of the old year.

Output in the first two weeks of 1960 was some 7.5 million gallons lower than the same period of 1960.

Dropping propane production accounted for half the total lpg loss as output declined to 174,504,000 gallons after hitting 218,963,000 gallons in the last two weeks of December. Other gasses lost nominal amounts.

Inventory also tumbled with stocks on January 15 reported at 875,122,000 gallons, a drop of 60 million gallons from stocks reported on December 31. Here again propane led the way with stock depletions of 55 million gallons.

Crude Oil Stocks

Domestic and foreign crude petroleum stocks at the close of the week ended Jan. 21 were 2,884,000 bbls. lower than at the end of the preceding week.

Week ended Jan. 21—236,408,000 bbls.

Preceding week—239,242,000 bbls.

This decrease comprises a decrease of 1,644,000 bbls. in stock of domestic crude and a decrease of 1,190,000 bbls. of foreign crude.

(Source: Bureau of Mines)

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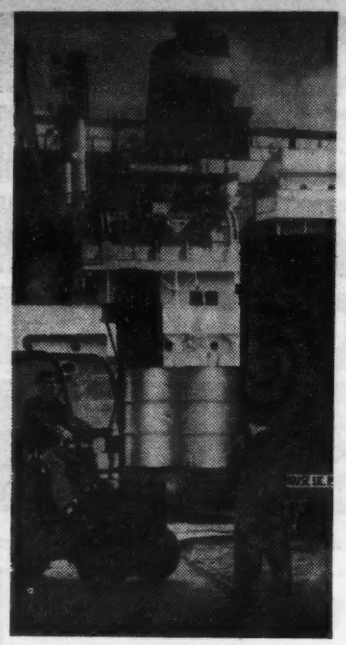

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Essential Oils, Aromatics

In a rather active week of price changes, there were three advances and four declines among the essential oils and aromatic chemicals. The aromatics, however, were decidedly firmer than the oils, showing two advances and only one decline. Only one oil advanced against the decline of three. Citral advanced 70 cents per pound, hydroxycitronellal advanced 85 cents and lemongrass advanced 35 cents per pound. Almond declined 10 cents per pound, eugenol declined 10 cents per pound, grapefruit declined 15 cents per pound and spearmint declined 25 cents per pound.

Among the imports that were detained by the Food & Drug Administration at the Port of New York, as being in violation of the act governing the products in question, there were: cassia, 21 lots, 3,448 bales; celery seed, 2 lots, 165 bales; coriander seed, 4 lots, 1,050 bags, and nutmegs, 4 lots, 406 bags.

The following subjects will be discussed at the annual symposium of the American Society of Perfumers on April 13 at the Essex House, New York.

• The relationship of odor and molecular constitution, by Dr. M. G. Beets of an international flavor company, Hilversum, Holland.

• Cross-adaptation effects, changes in thresholds after exposure of subjects to different colors, as well as the identification capacities of untrained observers, by Dr. Trygve Engen of Brown University.

• The olfactory process, studies of the receptor mechanism and the process of odor discrimination, by Dr. D. Tucker of Florida State University.

Theme of the symposium will be "Experimental Findings on Odor and Olfaction."

It seems that some experimental food the researchers are trying to feed to animals is not fit for a dog to eat. Not that the food is impure—far from it. It is nutritious and after the dogs have eaten it, fleas who bite them, die.

The dogs, however, find the food unpalatible. So the next step for the researchers is to mask the odor and taste of the food with compounds of essential oils and aromatic chemicals.

The project is being carried out at Oregon State College.

The mainland of China's 1960 sesame seed crop is unofficially estimated at approximately 385,000 short tons, according to the Foreign Commerce Weekly, published by the US Department of Commerce.

The 1960 crop is a drop of 40,000 tons from 1959 and 25,000 tons below the 1958 level, according to the Foreign Agricultural Service.

Acreage in 1960 is believed to have declined moderately from the 2.3 million acres in 1959, and yields probably were down.

Price Trends

Advanced

Citral, 70c per lb.
Hydroxycitronellal, 85c. per lb.
Lemongrass, 35c. per lb.

Reduced

Almond, 10c. per lb.
Eugenol, 10c. per lb.
Grapefruit, 15c. per lb.
Spearmint, 25c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
144.12	144.08	144.94	147.85

For Current Prices see Page 10

Essential Oils

Almond—Sweet almond has dropped in price from its previous listing, 70 cents per pound. It is now selling for 60 cents per pound.

Avocado—Due to the small size of this market, the listing has been discontinued. From the producing areas comes the word that there is no avocado oil unless there are adverse weather conditions which render the fruit unfit for consumption in its natural state.

When this happens, oil is gotten from the salvaged fruit and put on the market only as a means of helping to defray the cost of the crop.

Hence, the appearance of avocado oil is sporadic.

Recently, however, a number of companies have expressed an interest in the incorporation of an avocado oil in their cosmetic preparations. As it stands now, though, the oil is too expensive to be used for such a purpose.

Bay—No price changes were noted last week.

Bergamot—Dealers report material is moved in good volume. No price changes have been noted.

Bois de Rose—Little price changing has been noted in the market for some time.

Cassia—Material is said to be moving in adequate volume, according to reports from essential oil dealers here in the New York area.

Chenopodium—The market is said to be firming.

Citronella—Prices as high as $1.45 per bound are heard around the trade, but the OPD listing remains at its previous $1.20 per pound, for Java-type material.

Citronella from Ceylon remains at its previous quotation, $1 per pound.

According to historical data, one of the earliest references to citronella in Europe was near the end of the 17th century.

It seems that an army surgeon named Nicolaus Grimm gave the name, Arundo Indica odorata, to the grass and the name, Oleum siree, to the oil.

Ceylon was the first principal supplying region. It had a virtual monopoly on the oil until 1890 when Java started to produce it. Now, what is produced on the island of Formosa is referred to as Java-type.

Generally speaking, the material is planted in March and is ready to be cut in October. When the field is two years old and older, it can be cut twice a year—usually in June and October.

After it is cut, the grass is allowed to dry in the fields for approximately three days. The drying time depends largely upon the amount of sunshine and the atmospheric conditions.

When dry, it is tied, stacked in the fields for more drying and then hauled on carts to the distilleries.

Clove Leaf—No price changes have been noted for some time, but the overall condition of the market is that of weakness.

On the island of Madagascar there is only one harvest a year.

The harvest begins in the middle of October and ends toward the last days of December in Sainte Maire, a small island about 25 miles away from the Saonierana Ivongo region of Madagascar proper.

Harvesting begins in Sanoierana Ivongo usually in mid-November. Most of the harvesting is done by hand.

Native workers separate the stems and buds in the evenings when they return from the fields to their huts, according to agricultural information.

Ginger—The OPD low remains at its previously-quoted level, but there is some speculation that the market is firming. The low continues at $12 per pound.

Grapefruit—From its previous level, $2.90 per pound, this oil has gone down to $2.75 per pound.

Guaiacwood—Firmness is reported in the market.

Lemongrass—The price has advanced from its previously quoted high, $2.10 per pound to $2.45 per pound. Prices over the $2.50 level are heard about the trade.

Petitgrain—Mentions of this oil are noted back as far as 1694 in Histoire des Drogues by Pomet. At that time, the oil was distilled from the small unripe fruit, about the size of a cherry.

Pomet says that the small fruits were infused in water for five or six days before distillation.

The orange trees are pruned about the end of June and from these prunings are

Imports Detained at N. Y.

Week Ended January 13, 1961

Cassia, 21 lots, 3,448 bales.
Celery seed, 2 lots, 165 bags.
Coriander seed, 4 lots, 1,050 bags.
Nutmegs, 4 lots, 406 bags.

Essential Oils

separated the leaves and twigs which yield the petitgrain oil of today when they are distilled.

It is said that the finest oils are obtained from the bitter orange trees of France. Other oils, however, are distilled in Tunis and Paraguay.

Sandalwood—Material continues to be available for $21 per pound. Few dealers in the New York area have material, however, and most of the ones who do are asking upwards of $25 per pound for it.

Spearmint—Further declines were noted in spearmint oil. From its previous low, $7 per pound, it has dropped to $6.75 per pound.

Aromatic Chemicals

Citral—The extra material has advanced from its previous listing, $3.80 per pound, to $4.50 per pound. The rising prices of lemongrass is said to be responsible.

Eugenol—The USP grade has declined in price. From its previous price, $2 per pound, it has gone down to $1.90 per pound. Weakening in the clove market over a long period of time is the reason.

Hydroxycitronellal—Material has advanced considerably in price. From its previous price, $4.85 per pound, it has risen to $5.70 per pound.

Seeds and Spices

Basil—French material has come down in price from 80 cents per pound to 79 cents per pound.

Canaryseed—Material from Argentina has advanced in price. From its previous price $7.75 per pound, it has advanced to $8.40 per pound.

Cardamoms—Guatemala material has declined from $2.80 per pound to $2.75 per pound.

Chillies—Turkish chillies have advanced from 26 cents per pound to 27 cents per pound whereas Sudan material continues to decline. From 56 cents per pound it dropped to 52 cents per pound.

Coriander seed—Argentine material is declining. From its previous, 16 cents per pound, it has declined to 15 cents per pound. Roumanian material is also lower, down to 14 cents per pound.

Nutmegs—From its previous price, $1.25 per pound, West Indian material declined to $1.20 per pound. East Indian material also declined. From its previous price, $1.20 per pound, it went down to $1.18 per pound.

Pepper—Both Malabar and Lampong black declined. From their previous prices, 48 cents per pound, they both went down to 46 cents per pound. Muntok white advanced from its previous 73 cents per pound to 74 cents per pound.

Vanilla Beans—No price changes were noted.

Bourbon material continues to range between $7.35 and $7.50 per pound; Mexican cut material continues to range between $7.25 and $7.50 per pound, and Mexican whole material continues to range between $7.75 and $8.50 per pound.

Nat'l Distillers Cozier

—Continued from page 7

integrated producers and fabricators of exotic materials.

(National Distillers owns 60 percent of Reactive Metals, while Sharon Steel Corporation owns the rest. Bridgeport Brass was paid to run the concern.)

Under the present merger proposal, National would exchange 1.35 shares of its common stock for each share of the Bridgeport, Conn., company's common.

It was noted that on completion of the merger Bridgeport Brass would become a division of National Distillers and that no changes would be made in management or staff.

Austin R. Zender, currently president of Bridgeport Brass, would continue to head that unit under the merged organization. He would also become a director of National Distillers and chairman of its executive committee.

Phosphatic Fertilizers

—Continued from page 5

deposits and a consequent lessening of the drain on Florida and Tennessee reserves in the future.

"Development of a new 54 percent concentrated superphosphate utilizing 'superphosphoric' acid (produced by a new process developed by TVA) is definitely in the picture. This development should aid materially in increasing production of high analysis solid and liquid fertilizers."

Ammonium phosphate production is increasing rapidly now, according to Dr. Nelson, and will continue. A new material, ammonium polyphosphate, is a promising development.

"This material has a typical analysis of 15-62-0. It can be used in solid mixed fertilizers and also has the great advantage that it can be stored in solid form and quickly made into liquid fertilizers as needed."

Dr. Nelson said there "are possibilities for new scientific breakthroughs. Atomic energy may find a place in the fertilizer industry. Ways may be found to produce new phosphate compounds for fertilizer use which are higher in phosphorus content than conventional compounds or materials and more effective in providing phosphate to the plant roots, the speaker concluded.

Magnus to Be Honored

Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., New York, will be honored at a testimonial dinner sponsored by the Association of Manufacturers of Confectionery & Chocolate, to be held Wednesday (February 9) at the Biltmore hotel, New York.

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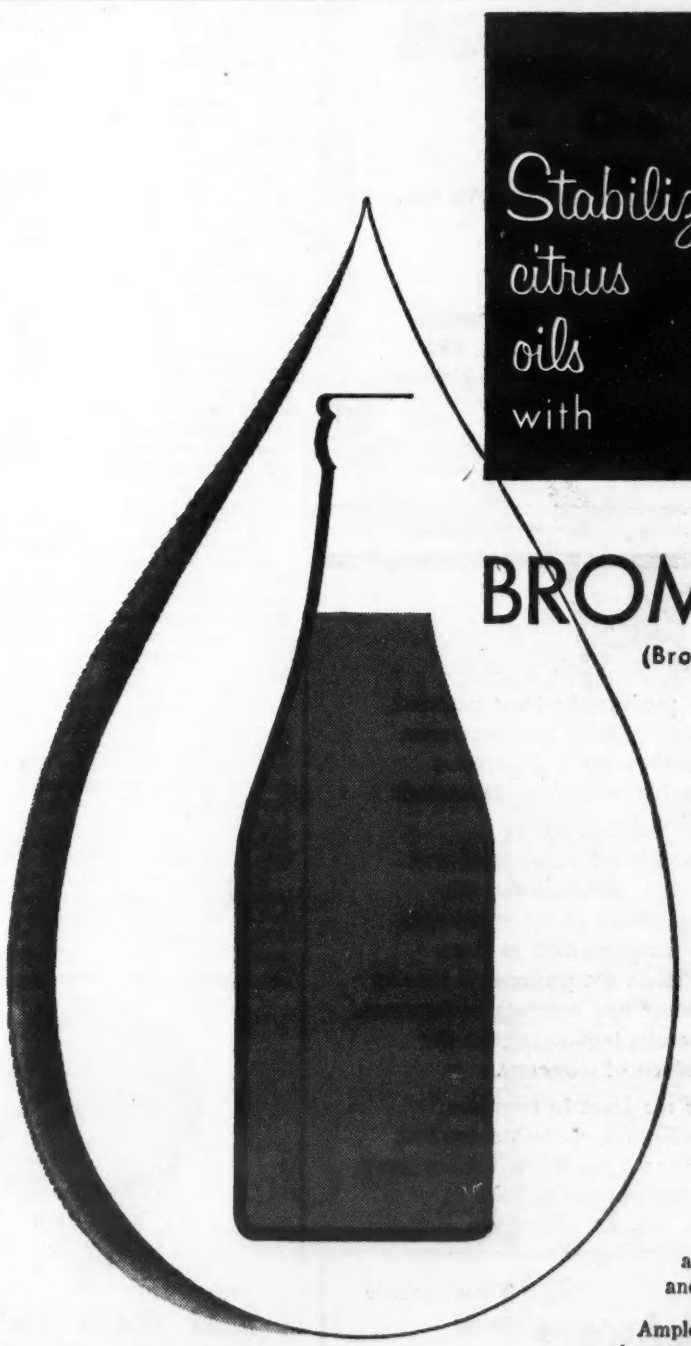

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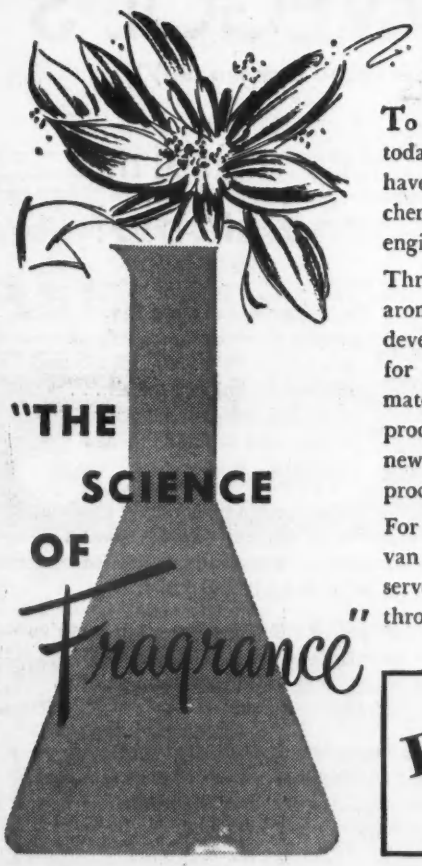

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OPD Reports from Europe

European Chemical Patents a Jungle

—Continued from page 9

most important economic agency in the UK—suggests that an international board be created which will search for novelty as the International Patent Institute at the Hague now does, but will go on to examine and approve patent specifications. Under the Maudling scheme, approval by this body would result in a patent valid in all countries that are members of the agreement setting up the board.

The international patent would be difficult to obtain and would not end domestic patents within member states, Mr. Maudling adds. He would have each member country keep its own patent law, its courts and infringement and opposition procedures.

But the scheme would make it "obligatory on member countries to recognize the international patent as conferring a monopoly in their territory unless and until it was successfully challenged there."

About the only matters of international uniformity in the patent field are requirements that anything patented should be novel and almost every nation spells out conditions such as war under which it can seize patents.

Most countries allow opposition to a patent any time during its life, but in Russia opposition to an author's certificate must be started within the first year after publication.

How Japanese View Patents

The Japanese rule that lack of opposition to a patent during the first three years of its life confers an absolute validity on the patent causes some soul-searching among European chemical companies. Litigation in the East usually is long-drawn and may end in a court decision that is unsatisfactory to Western legal minds.

One company reports, for example, that it challenged a Japanese chemical company for infringement and wound up with a court judgment requiring it to join with the infringer and a third company in working the patent. "Their concept of justice in a commercial law suit requires that everyone should win something if at all possible," comments an attorney for the company.

The diversity in patents begins with length of life: One to five years in Portugal; fifteen years in Austria, Bulgaria, Czechoslovakia, Denmark, Finland, Italy and Russia; sixteen years in Britain; seventeen years in Norway, Sweden and the US, and twenty years in Belgium and Spain.

A possibly more important diversity involves the manner in which an invention's novelty may be destroyed. In France, Holland and Turkey any publication in any country will destroy novelty. In Belgium publication or commercial use of an invention in any country will destroy novelty, and in both Belgium and Italy publication by patent application in another country destroys novelty.

Germany and Austria follow the US rule, barring publication in any country but allowing commercial use outside the country of application. In Denmark, Ireland, Norway and Britain, publication or prior use must take place in the country of application to destroy novelty.

There is equal diversity in procedure and search thoroughness. In France, Greece, Italy, Spain and Turkey, the patent administration's task is limited to seeing that all the formalities are complied with and then the patent is automatically registered, unless the law of the country expressly declares such inventions to be unpatentable (as drugs are in Italy).

In Austria, Czechoslovakia, Germany, Holland, Sweden, US, Britain and Russia, patents are granted only after examination into patentability and novelty of the invention.

In general, the search procedure in Holland and Germany is considered to be even tougher than that in Washington. In Germany, Sweden, Holland, Britain and Russia the patent administration may ask for opposition from third parties before the patent is granted.

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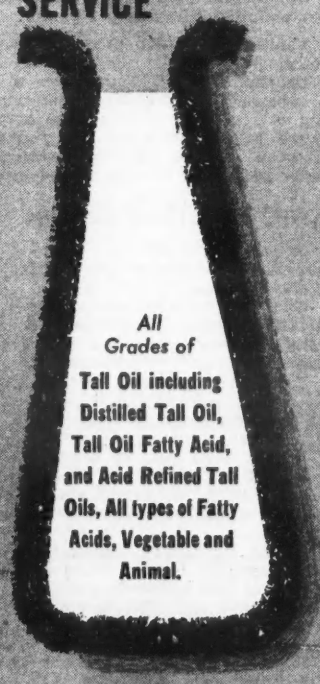

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Oils, Fats and Waxes

Sharp gains for soybeans and oil futures continued to feature the market and was reflected in other edible oils. This boosted soybean oil for prompt delivery to the highest level since January 1958 and cottonseed oil to July 1959. Corn oil was up fractionally, while peanut oil declined ¼ cent per pound. Consumer demand was limited as a result of the sharp advance, the trade preferring to await further developments. Crude coconut oil was steady and unchanged for prompt delivery. Copra for prompt shipment continued firm, shortening in bulk was advanced 1 cent per pound.

Italy continued to absorb Spanish olive oil in good volume for prompt shipment. European buying of late has been the mainstay of the market, while US demand was reported light.

Tallow and greases were firmer, reflecting the strength of other fats. Buying interest was limited but offerings were scarcer and held at fractionally higher prices. Edible tallow was stronger, with lard advancing ½ cent per pound.

Feature of industrial oils was the sharp advance in tung oil which was boosted about 2 cents per pound, because of the scarcity of oil replacements from the Argentine combined with sales of government owned oil at an increase of 2 cents per pound from previous sales. Linseed oil also was stronger and lifted ½ cent per pound due to the sharp advance of flaxseed. Other oils in this group were unchanged and well held.

Soybean meal demand was limited but the market was steady and unchanged compared with $4 boost the week previous. Linseed meal was steady and unchanged. Cottonseed meal was quiet and off 50 cents per ton.

Price Trends

Advanced

Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ⅜c. per lb.
Refd., ⅜c. per lb.
Lard, cash, ½c. per lb.
Linseed oil, ½c. per lb.
Tallow, edible, ½c. per lb.
Tung oil, 2c. per lb.
Soybean oil, crude, ½c. per lb.
Refd., ½c. per lb.

Reduced

Carnauba wax, 2c. per lb.
Cocoa butter, 1c. per lb.
Cottonseed meal, 50c. per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
106.60	*106.60	106.33	120.62

* Corrected.

For Current Prices see Page 10

Vegetable Oils

Castor—Slow demand continued to unsettle the market for imported oil. No. 1 Brazilian ranged from 17½c. to 17¾c. per pound, tankcars, New York, prompt delivery, depending upon seller. Domestic grades were in light demand and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week		788.000
Previous week		3.574.000
Corresponding week, 1960	201.450	1.206.000
Total this year		9.380.000
Corresponding period, 1960	580.050	10.612.000

Coconut—Crude remained steady and unchanged at 12½c. per pound, tankcars, f.o.b. Pacific coast, February delivery and 12¾c., March. The New York market was unchanged at 13¾c., tankcars, prompt delivery.

Corn—Trend was upwards with competing oils. Crude was sold at 16c. per pound, tankcars, f.o.b. mills. Refined oil was boosted to 19.73c., tankcars, New York basis.

Cottonseed—Futures continued to score sharp gains on the New York Produce Exchange last week, reflecting further advances in soybean oil. Trading was active, chiefly speculative. Consumer interest in cash oil was slow. Crude oil was higher and reached the highest level since July 1959. Refined salad oil was raised to 16c. per pound, tankcars, New York, prompt delivery.

The New York Produce Exchange announced that the volume of trading in cottonseed oil futures contracts for the month of January 1961 amounted to 10,480 or the highest monthly volume since April 1952. Previous volume months were in May 1952 with 10.154 contracts and May 1956 with 9,531 contracts.

Offers of crude continued limited. Sales were reported at 12c. per pound tankcars, f.o.b. mills, Valley and ranged from 12⅛c. to 12¼c. in the southeast. Waco was nominal at 12c. and Lubbock at 12c.

Refined cottonseed oil disappearance in January was indicated at 2,592 tankcars compared with 2,756 in November and 2,210, December 1959. Total for this season (August-December) was 11,683 tankcars against 10,608 for the same period the previous year.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, February 3, follow:

	Sales	Cents per Pound High	Low	Close
March	317	14.42	13.60	14.35@14.38
May	1,516	14.54	13.71	14.46S
July	1,101	14.59	13.80	14.52S
Sept.	179	14.30	13.66	14.18S
Oct.	66	13.97	13.40	13.83@13.91
Dec.	9	13.50	13.15	13.40@13.91

Total sales and switches, 3,188 contracts.

Linseed—Market was stronger, prices were lifted ½c. because of the sharp advance of flaxseed. Raw oil was raised to 13.10c. per pound, tankcars, Minneapolis, February-April; 13.30c. May-July, and 14.22c., f.o.b. New York. Trading became active before the advance became effective.

Oiticica—Steady tone prevailed in this market. Tankcars ranged from 13¾c. to 14¼c. per pound, New York, for prompt delivery, as to seller with business reported thereat. Drums were named at 15¼c. to 15¾c., spot, according to quantity.

Olive—Active demand for Spanish oil from European buyers continued to feature replacements. Italy absorbed sizable quantities on the basis of $52 to $53 per 100 kilos, drums, f.o.b. Spanish ports. Demand from the US continued light. Oil on spot was available from $2.30 to $2.40 per gallon, drums, exwarehouse, depending upon quantity.

Peanut — Increased offers weakened market. Crude sold at 13¾c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was lower at 17c., tankcars, New York basis.

Soybean—New highs for soybean futures continued to feature cash oil. Consumer interest, however, was quiet. Crude was boosted to 15⅞c. per pound, tankcars, f.o.b. Decatur, unrestricted for prompt shipment, which was the highest level reached since January 1958. Refined ad-

—*Continued on page 54*

Cottonseed Crush: November

Cottonseed received and crushed and production of cottonseed products during December and November, as compiled by the Bureau of Census, follows:

Cottonseed

	December	November
	Tons	
Receipts at mills[1]	590,900	*1,495,500
Crushed or used	611,100	*740.000
Stocks at mills	2.373.300	2.393,500

Crude Oil

	Pounds	
Produced	205.300.000	*248.300.000
Stocks at mills	49.000,000	58.600,000

Cake and Meal

	Tons	
Produced	286.900	*344.500
Stocks at mills	196,600	198.800

Hulls

	Tons	
Produced	138.500	*164.700
Stocks at mills	71,800	70,000

* Revised.
[1] Net receipts for each state are derived from the quantity of seed crushed and the net changes in stocks.

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Coatings Materials

Nineteen-sixty went out with a wimper as far as sales of paint, varnish and lacquer are concerned. Shipments of paint in all categories were reported to be off, including trade and industrial finishes. December sales of paint products skidded to $11 million after racking up the best November on record. The $110 million-figure represents a reduction of 13 percent over November's total, reports the Bureau of Census.

Output of paint, varnish and lacquer was down some 10 percent compared to the previous month's production. Total output for the month was placed by Census at 43.9 million gallons, as against 48.3 million for November and 46.9 million for December of 1959. (For further details see table below.)

Conditions in the rest of the coatings market remained unchanged from previous weeks. Spot markets were generally quiet with casein demand way off from the usual levels. Shellac and natural gums were both reported to be at routine levels.

Imported casein held about the same, at the lower quotations failed to draw any sort of response on the market. Argentine continued at 16¾ cents per lb. to 17¼ cents per lb., for best quality mesh material. French, Australian, and New Zealand casein were reported to be unchanged in listing.

There is one report in the trade to the effect that the French may enter the casein market with sizable amounts of material. Coming at the worst possible time, movement of more casein on to the market might serve to drop prices even lower than the rock bottom levels now prevailing.

The plasticizer situation continues to be described as snug in regard to the supplies of the phthalate esters. Lessened business interest is said to have taken some of the pressure off producers in meeting more than commitment levels. Listings in this snug supply position hold very firmly to their recent adopted ½ cent per pound increase.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 5, 1960
104.56	103.15	103.14	103.03

For Current Prices see Page 10

Prime Pigments

Carbon Black—Production of carbon black in December was 9.8 percent below December, 1959 according to the Bureau of Mines. Shipments decreased 18.1 percent from December a year ago, while stocks showed a corresponding increase of 18 million pounds in December. Total 1960 production was up 4.3 percent, but shipments decreased 4.1 percent with a build up of stocks reported at 77 million pounds in 1960.

Total carbon black production in December was reported by the Bureau of Mines at 163.560 million pounds of which furnace output was 139.494 million pounds and channel 24.066 million pounds. December's output brought the total for 1960 to 2,052.247 billion pounds, as against 1,967.186 billion for 1959.

Shipments of carbon black were estimated at 145.592 million pounds in December as against 163.568 million pounds in November. December's shipments rounded out the total for the year at 1,975.141 billion pounds. For 1959, the total shipments of carbon black were reported at 2,055.467 billion pounds.

Stocks of carbon black at the end of December were reported at 271,034,000 pounds of which 198.908 million pounds were furnace and 72.126 million pounds were reported as channel. The increase in stocks during the month of December was estimated at 28.738 million pounds.

Exports of carbon black during November were estimated at 49.102 million pounds, compared to 52.548 million pounds for the previous month. November's exports brought the total for the first eleven months of 1960 to 498,250,000 pounds. Exports of carbon black during the corresponding period of 1959 was reported at 460,595,000 pounds of black.

On the basis of the Bureau of Mines report, it would seem that the pessimistic outlook painted by trade sources earlier in the year on the export market for carbon black has not materialized .

It had been anticipated that with the establishment of several carbon black plants in Europe, exports from the US would fall off. Since the first eleven months of 1960 has shown an increase of some 38 million pounds of carbon black over the previous year's performance, the effect of the new European plants has not apparently been felt as yet. What the effect will be next year is perhaps another question.

Dry Colors—The listings for the dry colors are reported to be firmly established at their recently established levels. Some hand-to-mouth buying has dropped the level of business back to routine levels. Demand is felt to be about normal for this time of the year. The outlook for the market promises some improvement as the weather turns warmer.

Lacquer Materials

Plasticizers—On the basis of reduced demand for the plasticizers, the supplies of the phthalate esters are described as snug. The reduction in the level of business is not felt to be severe and has at least provided producers with some relief from the pinch in supplies that has plagued the trade over the last 12 months.

Production of the esters as reported by the Tariff Commission, placed dioctyl phthalates (di-n-octyl, di-isooctyl, di(2-ethylhexyl) phthalates and mixtures) production in November at 12,485,230 pounds as compared to 11,763,326 pounds during the previous month.

The output of dibutyl phthalates reported by the Commission lost ground in November, as production slipped from 1,274,951 pounds in October to 1,068,312 pounds for November.

Tricresyl phosphate output went over the 2 million pound mark in November as production for that month hit 2,211,665 pounds. This compares to the 1,759,705 pounds reported for the previous month.

Miscellaneous

Animal Glue—The Bureau of the Census reports that total glue production in December was 8.767 million pounds as against 8.454 million pounds during the previous month. For December, 1959, total production was reported at 9.510 million pounds.

December's output of hide glue was reported at 4.415 million pounds and bone glue at 4.352 million pounds. For the previous month, output of hide glue was reported at 4.167 million pounds and bone at 4.287 million pounds.

Shipments of bone glue in December totaled 3.512 million pounds and 4.145 million pounds for a total of 7.657 million pounds. For the previous month, shipments were reported at 8.337 million

Coatings Shipments Output: December

	Factory Shipments Dollars		Reported productions Gallons[1]	
	December	November	December	November
Trade sales	$60,700,000	$69,700,000	22,100,000	24,100,000
Industrial sales, total	49,900,000	57,300,000	21,800,000	24,200,000
Paint and varnish	36,000,000	41,000,000	16,100,000	17,700,000
Lacquer	13,900,000	16,300,000	5,700,000	6,500,000
Overall totals	110,600,000	127,000,000	43,900,000	48,300,000

Totals sales Jan. Dec.: $1,360,600,000.

[1] Estimated total production. About 2 percent of this total was imputed for companies that reported only dollar sales.

pounds, while for December of 1959, shipments totaled 8.310 million pounds.

Stocks of bone and hide glue were placed at 37.347 million pounds, up from the previous month's total of 36.237 million pounds and the figure of 32.340 million pounds reported for December of the previous year.

Casein—The market for imported casein continues on the quiet side (perhaps silent would be more accurate) as listings held tenaciously to their lower listings. Argentine casein remains mired in the range of 16¾c. per pound, to 17¼c. per pound with Polish casein listings following closely in the same range. Supplies, of course, are at very ample levels. No change is reported on the listings for Australian, French or New Zealand casein.

One report in the trade last week is to the effect that the French may be ready to move large quantities of French casein on to the market. The report has not been confirmed but is from a usually reliable source. The appearance of more casein on the market would not be well-timed, and might have the effect of driving listings still lower.

It seems apparent at this time that the supplies of casein are far in excess of world demand but according to some in the trade, the heart of the problem is not one of over-production but under-consumption. According to this view, efforts should be made to induce consumers to make more purchases rather than cut back production.

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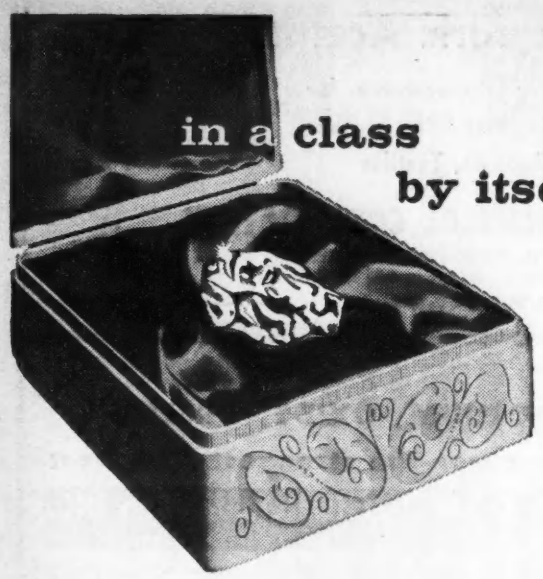

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Oils, Fats and Waxes

—Continued from page 51

vanced to 14½c., tankcars, New York, prompt delivery.

Consumption of crude soybean oil was placed at 6,592 tankcars during December compared with 5,557 in November and 5,165, December 1959. Total consumed for this season (October-December) amounted to 17,604 tankcars against 16,465 a year ago.

Tung—Price trend continued to advance last week. Scarcity of offers of domestic oil and for shipment from the Argentine boosted prices 2c. Imported oil was reported sold up to 27c. per pound, tankcars, New York for prompt delivery, with sellers holding at ½c. more. Market has reached the highest level since July 1955. Sales of government-owned oil at higher prices also was a factor. CCC sold 720,000 pounds of tung oil at prices ranging from 26.27c. to 26.69c. per pound, bulk, f.o.b. Marrero, La., for unrestricted use. Bids were received for 4,360,000 pounds. Domestic producers were not offering and light sales and bids were reported at 27¼c. tankcars, f.o.b. mills.

Miscellaneous

Cocoa Butter—Market was weaker and off 1c. Spot stocks were quoted at 56c. to 61c. per pound, drums, depending upon quantity.

Copra—Shipments were maintained at $170 per ton, c.i.f. Pacific coast, prompt with bids at $5 less. Market held steady.

Flaxseed—Cash flaxseed bids advanced 9c. a bushel, reflecting strength in futures at Minneapolis and Winnipeg, as well as spectacular advances in Chicago soybeans. Flaxseed at the head of the lakes traded at 3c. to 5c. premiums over Minneapolis, a result of export interest. Volume of cash trading was light in the advancing market, crushers watching for stability. Bids were at $3 a bushel, spot and to-arrive, basis Minneapolis.

Fats and Greases

Greases—Market was steadier with other fats. Buying interest was limited, but offerings were scarcer and generally held ⅛c. higher than previous sales. Choice white ranged from 8⅞c. to 9c. per pound, tankcars, delivered. Yellow grease was maintained at 5⅝c. to 5¾c., same basis.

Lard—Market was firm and higher. Cash lard was raised to 11.80c. per pound, Chicago.

Tallow—Firmer tone developed reflecting the strength of other fats. Buying interest lagged, but offerings were scarcer with seller naming ⅛c. to ¼c. higher. Bleachable fancy ranged from 6½c. to 6⅝c. per pound, tankcars, delivered; prime, 6¼c. to 6⅜c.; special, 6c. to 6⅛c.; guaranteed fancy, 6¾c. to 6⅞c. and No. 1, 5⅝c. to 5¾c., same basis. Guaranteed fancy was nominal at 7c. per pound, bulk, f.o.b. steamer and 7⅞c., drums, f.a.s. Edible tallow was higher with lard and lifted to 10c. to 10¼c., tankcars, delivered.

Soybean Crush: November

Soybeans received and crushed and production of soybean oil and meal during December and November, as compiled by Bureau of Census, follows:

Soybeans

	December	November
	Tons	
Receipts at mills	777,100	1,799,400
Crushed or used	1,130,700	1,102,200
Stocks at mills	3,318,100	3,671,700

Crude Oil

	Pounds	
Produced	409,800,000	401,100,000
Stocks at mills	3,318,100	3,671,700

Cake and Meal

	[1] Tons	
Produced	886,700	864,700
Stocks at mills	105,500	114,100

[1] Includes millfeed (hull meal).

Cake and Meal

Cottonseed Meal—Demand was limited to actual needs. Meal, 41 percent, was offered at $55 to $55.50 per ton, sacked, Mississippi Valley area; $58 to $60, Alabama-Georgia basis.

Linseed Meal—Increased rate of shipping directions and sharp advances in soybean meal brought firmer undertone to linseed meal market, although prices were unchanged. Extracted meal, 34 percent, was quoted $56 a ton for immediate shipment. Old process expeller meal was unchanged at $61.50 for February-March.

Soybean Meal—Trading was extremely slow in this market as feed manufacturers resisted recent sharp upturns. Crushers were not pressing for business and production was curtailed in some quarters. Meal, 44 percent, was higher at $57.50 per ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetable

Buying interest continued confined to actual requirements. Scarcity of crude beeswax kept this market firm. Offers for shipment were limited and maintained at unchanged prices. Trading in refined beeswax was fairly active for prompt delivery. Interest in carnauba grades was restricted to actual needs. Prices were easier because of lower foreign exchange and most grades dropped 2c. on spot. No. 3 Ceara crude ranged from 64c. to 65c. per pound, spot, as to quantity and Parnahyba was 2c. more. No. 1 yellow Ceara was reduced to 94c. to 96c. spot, and Parnahyba to 95c. to 96c.

nahyba to 95c. to 96c.

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36"x17'—15 Bubble Cap Trays
48"x40'—36 Bubble Cap Trays
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72"x30'—21 Bubble Cap Trays
78"x18'—14 Bubble Cap Trays

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24"x17'—24 Bubble Cap Trays
30"x11'—12 Bubble Cap Trays
36"x12'—15 Bubble Cap Trays
48"x15'—26 Bubble Cap Trays
48"x15'—50 Bubble Cap Trays
72"x16'—16 Bubble Cap Trays

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6000 gal. Vert. 8'x18'
5000 gal. Vert. w/coils
4500 gal. Vert. 8'x12'
3500 gal. Vert. w/coils
3500 gal. Horiz. 7'x12'
3500 gal. Vert. 8'x9'
1750 gal. Horiz. 6'x8'
1250 gal. Horiz. 5'x8'
1200 gal. 5'x8' agit.
1000 gal. 5'x7' agit.
950 gal. Vert. 5'x5'
750 gal. 5'x5' agit.
500 gal. 3'6"x8' agit.
500 gal. Vert. w/coils
400 gal. 4'x4' agit.
300 gal. 4'x3' cone bot.
150 gal. 3'x3' agit.
125 gal. Vert. 2'x5'
80 gal. Vert. 2'x3'6"

GLASS LINED
2000 gal. Vert. 6'6"x8'8"
2000 gal. Horiz. 6'x10'
750 gal. Horiz. 5'x5'
400 gal. Vert. 4'x4'

ALUMINUM
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10000 gal. Horiz. 9'x23'
7000 gal. Vert. 10'x12'
6000 gal. Vert. 8'x16'
1500 gal. Vert. 5'x10'
750 gal. Vert. 4'6"x6'

COPPER
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3000 gal. 8'x8' w/coils
2000 gal. 7'x7' w/coils
500 gal. 4'x5' w/coils

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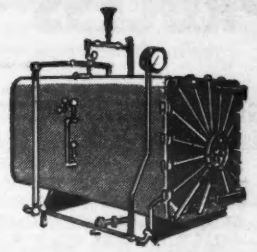

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Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
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2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP Motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

REACTORS—PRESSURE VESSELS

2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
6 Door-Oliver Stainless Steel Thickeners or Reaction Vessels; 550 gal. 5' x 5'.
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2 MONEL Reactors; 2800 gal. 6'8"x13'; ASME Jktd. & Intern.
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Pfaudler Gl. Lined Reacters; all sizes from 50 to 1000 gal.
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Buflovak S/Steel Thermo-Recompression Evaporator.
Buflovak S/Steel Dbl. Effect Evaporator Model 8½-60 D.
Link Belt Roto Louvre Dryer model 502-20.
Pittsburg Lectro Dryers, Bac 25 and BWC 3400.
Devine Vac. Chamber Dryers, Double Door Model No. 36.
Stainless Lab. Drum Dryer, 8"x11½".
Bowen S/S Lab. Spray Dryer.

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Baker Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.
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2 Stainless Steel Micronizers 30".
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American Ring Roll Crusher; 50 HP.
Mikro S/S Atomizers; Nos. 6 and 5.
Raymond Imp Mills; many sizes.
Williams Hammer Mills to 60 HP.

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3" x 2" Monel. 5'3" x 8' Stainless.
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Feinc S/S Rot. Vac. Filter 3' x 1'.
Oliver Cont. Rot. Vacuum Filters.
Panel Type; 8' x 8' and 8' x 10'.

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4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.
Sparkler S/S Filter Model 14 S 4.
Sparkler Steel Filter Model 33 S 17.
S/S Nutsche Type Filter; 6' x 2'.
Bowser Filter with Pump; 2000 GPH.

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1—American 42" x 120" dbl. Drum dryer, ASME, stainless.
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1—AMERICAN 36" X 84" DBL. DRUM DRYER, ASME, VACUUM.
1—BUFLOVAK 5' X 12' SINGLE DRUM DRYER, VACUUM.
1—Buflovak 32" x 52" dbl. drum dryer, ASME 100# WP.
1—Buflovak 6' x 8' dbl. drum dryer, vacuum.
2—Buflovak Vacuum shelf dryers: 110, 98 sq. ft.
2—Hardinge 8'8" x 70' rotary dryers, ⅜" welded.
2—DAVENPORT 8' X 60' ROTARY DRYERS, 7/16" WELDED.
1—Louisville 4'6" x 25' rot. steam-tube dryer, welded.
1—Hardinge 4' x 30' rot. steam-tube dryer.
1—Bartlett 3' x 15' rotary dryer, everdur shell.
1—Wyssmont #6-18 tray dryer, 18 stainless trays.

MIXERS

1—Baker-Perkins #18, 300 gal. duplex jktd. shredder.
50—BAKER-PERKINS #17, 200 GAL. SIGMA JKTD. MIXERS.
1—Baker-Perkins #16, 150 gal. sigma jktd. mixer.
1—BAKER-PERKINS #15-UUMM, 100 GAL. DISPERSION MIXER, 100 HP, ASME JACKET, CORED BLADES, COMPRESSION COVER, MOTORIZED TILT.
1—J. H. Day #6 Cinc., 100 gal., sigma blades, Stainless.
2—Baker-Perkins #15, 100 gal., sigma jktd. mixer.
1—Read 100 gal., sigma blades, non-jacketed.
2—J. H. Day #5 Cinc., 75 gal., sigma blades.
2—W. & P. #14, 50 gal., sigma blades.
1—J. H. Day #2 Cinc., 20 gal, jktd., sigma blades.
2—Sturtevant #59B rotary blenders, Stainless.
3—Komarek 30" dia. x 14' long, horiz. dbl. paddle mixers.
1—Marco continuous Roto-feed mixer, Stainless.

STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
2—4500 gal. vert., T304 SS, 8' x 12', UNUSED.
1—4300 GAL. HORIZ. T304 SS, 6' x 20', DISHED HEADS, 50# WP.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3200 gal., vert., T304SS, 6'6" x 12', dished heads, coils.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T316 SS, 7' x 8', DISHED HEADS, COILS.
1—2500 gal. vert., T316 SS, 7' x 7', dished heads, agit.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1600 gal horiz., T304 SS, 5' x 11', dished heads.
6—685 gal. vert., T316 SS, 3' x 13', coils.

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2—16,200 SQ. FT. QUAD. EFFECT EVAP., COPPER TUBES, CAST IRON BODIES.
1—MOJONNIER 2085 SQ. FT. TRIPLE EFFECT, T304 SS, WITH PREHEATERS.
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1—Buflovak 840 sq. ft. dbl. effect, T304 SS, size #7.5-42-D.
1—Buflovak 710 sq. ft., dbl. effect, T304 SS, size #7-35-D.
1—Buflovak 700 sq. ft. single effect, T304 SS, forced circ.
1—STRUTHERS-WELLS 630 SQ. FT. SINGLE EFFECT, T316 SS, CALANDRIA TYPE.
1—Buflovak 588 sq. ft. dbl. effect, T304 SS, size #6.5-29-D.
1—F. J. Stokes 118 sq. ft. single effect, T316 SS, U-tube still.
2—Rogers 6' dia. vacuum pans, T304 SS, int. coils.
1—1960 SQ. FT. T316 SS, HORIZ. EXCHANGER, ASME 75# WP.
1—1450 sq. ft. T316 SS vert. condenser, remov. bundle.
1—800 SQ. FT. T316 SS VERT. CONDENSERS, ⅝" OD TUBES.
1—730 sq. ft. T316 SS horiz. exchanger, remov. bundle.
6—691 SQ. FT. ANSONIA COPPER DOUBLE-PIPE COOLERS.
1—510 SQ. FT. T316 VERT. COND., REMOV. BUNDLE.
4—T316 SS exchangers-condensers: 427, 425, 410, 400 sq. ft.
10—T316 SS exchangers: 290, 277, 264, 250, 200, 185, 165, 150, 145, 105 sq. ft.
8—T316 SS exchangers, 83, 73, 54, 52, 50, 47, 30 sq. ft.
10—Enzinger 185 sq. ft. T304 SS contin.-flow exchangers.

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2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
2—Bird 24" x 38" Solid Bowl Continuous 304 SS.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—300 gal. Hastelloy B jacketed kettle.
2—Glascote 500 and 300 gal. glass lined jacketed agitated Reactors, UNUSED, 125# internal, 90# jacket pressure.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heate
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
2—1,000 gal. 304 SS Tanks 5'6" x 6'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
1—Feinc 3' x 3' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
2—#12 Sweetland Filters 36 leaves, 4" centers, 500 sq. ft.
4—36" x 36" alum. P & F, 65 Chambers, 1-1/2 cake, hyd. clos.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
7—40" x 43" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 5'x25', 6'x35' 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 6' wide Apron Conveyor Dryer 48' long.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—4' dia. Lancaster Mixer 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 750 cfm, 1 micron, 15 HP.
2—5 and 2-1/2 million Dowtherm Furnaces.
1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.

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1—Stokes stainless steel jacketed rotary vacuum dryer, 2' x 6'.

2—Theo. Walters Hastelloy B, 300 gal. jacketed reactors.

1—Pfaudler 750 gal. glass lined jacketed reactor, complete with agitator and drive.

1—Struthers Wells type 316 SS 2000 gal. jacketed reactor, complete with agitators and drive.

5—Pfaudler glass lined jacketed reactors, 30 to 300 gal., complete with agitators and drives.

2—Pfaudler glass lined vacuum receivers, 20 and 30 gal.

1—Buflovak stainless steel jacketed rotary vacuum dryer, 3' x 15'.

16—Kinney 2 stage vacuum pumps, Model KMB-1200 and KDH-130.

1—Stokes single door vacuum shelf dryer with six shelves 24" x 36".

2—Louisville stainless steel rotary dryers, 8' x 50'.

1—Allis Chalmers stainless steel rotary dryer, 6' x 50'.

2—Sturtevant stainless steel #7 dustite rotary batch blenders, NEW.

2—Bonnet rotary kilns, 8' x 115', complete with motors and drives.

1—Bonnet steel rotary cooler, complete with motor and drive, 8' x 50'.

1—American 42" x 120" double drum dryer with drive and motor.

1—Stewart Bolling 2 roll mill, chrome plated rolls, 8" x 16".

1—Raymond 2 roll high side roller mill, complete with oil journals.

1—Williams "Comet" 4 roll mill, complete.

10—Robinson stainless steel double ribbon blenders, 125 cu. ft.

1—Stokes stainless steel rotary vacuum dryer, 3' x 15'.

5—Robinson stainless steel double ribbon horizontal blenders, 255 cu. ft.

1—Gemco double cone conical blender, 40 cu. ft.

1—Baker Perkins SS double arm sigma blade mixer, 9 gal.

1—Baker Perkins Size 16 UUEM jacketed mixer, double arm dispersion type, complete with compression cover and 100 HP motor, 150 gal. capacity.

1—Baker Perkins Size 15, 100 gal. stainless steel jacketed double arm sigma blade mixer.

8—Tolhurst 30" and 40" center slung rubber covered centrifuges, with perforate baskets and motors.

7—Western States 40" type 316 SS suspended type centrifuges, complete with perforate baskets, plows and 40 HP motors.

1—Ross 6" x 14", 3 roll paint mill, high speed complete.

3—Mikro pulverizers, Model #1SH and #2TH, complete.

2—Mikro pulverizers, SS #3TH, complete with 40 HP motors.

20—Davis Engineering stainless steel heat exchangers, 102, 119, 136 and 166 sq. ft., NEW.

1—Hersey stainless steel rotary dryer, 3' x 20'.

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2—KETTLES S.S., Jacketed, agitated, 250 gal.

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3—PASTE MIXERS, 50 gal., 5 HP.

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2—SS Fitz Mills model D, w/5 HP mtr.

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1—Charlotte MD20—S.S. Colloid Mill—XP Motor.
4—Worthite S.S. Pumps—6" x 6"; 3" x 2"; 2½" x 2".
1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 444# hr.—30 HP.
4—Stainless Vacuum Receivers 50 to 100 Gals. 250 psi.
1—Horiz. Closed Spiral Mixer, 3' x 12', Jack.
3—Spiral Blenders, 800 to 2000#.
1—Day Stainless Steel Blender 2000#.
1—Patterson 5' x 6' Jack. Ball Mill, 25 HP.
1—Day 50 gal. S.S. Sigma Blade Mixer.
1—N. J. MX Pony Labeler.
1—Raymond 30" Whizzer Separator.
5—Rotex Screens 20" x 30" to 60" x 84".
1—Kent High Speed 3 Roll Mill 13" x 32".
2—Combs Type 'V' Gyrators—30"—XP Motors.
1—Devine Vac. Shelf Dryer, 10 shelves, 40 x 42.
1—Kent 20 Gal. Super Pony Mixer.
1—Mikro 2TH Pulverizer 15 HP.

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Wanted to purchase small established chemical company to be used as a neucleus framework —also interested in buying spin-off items. OPD 188.

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For Sale: Resina Automatic Capper; Day Stainless Steel Blender 2000#; Day 50 Gal. S.S. Double Arm Mixer; Mikro 3TH Pulverizer; Pfaudler 750 Gallon G.L. Reactor. Harry Pearlman, Market 2-3103. 91 N.J. R.R. Ave., Newark, N.J.

For Sale: Four stainless steel Double Effect Evaporators, Blaw-Knox Co. (Buflovak) 608-708-840-1025 sq. ft. each; 5000 gal. stainless Tank; 3000 and 900 gal. stainless Tanks with coils for full vacuum; 46" and 28" Suspended Centrifuges; Best Equipment Co., 1737 Howard St., Chicago 26, Illinois.

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Heat Exchanger or Condenser, single pass, 316SS, or Cupro Nickel, 1¼ to 1 & ¾" tubes, 14 to 20 feet long, and 1,000 to 1,500 sq. ft. Monel or 316 SS tank 8 to 12 feet dia. by 16 to 20 feet long. Also, large dia. Monel piping. Box 523, Great Bend, Kansas.

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Chemical Business

—Continued from page 3

a symptom of a basic and potential disastrous weakness in our economy, and this weakness is the deteriorating position of the US as a supplier of industrial products in world markets.

The senator's investigation into this area is still in its preliminary stages and probably won't get under way until spring. In all probability, it is stated by persons close to the committee, testimony will be sought from some of the chemical companies engaged in export business.

A. E. Staley Strengthens Overseas Information Ties

A. E. Staley Manufacturing Company, Decatur, Ill., has established an expanded working relationship with two European corn refiners through its wholly-owned subsidiary, Staley AG. The new arrangement increases the exchange of technical information between Staley and Glucoseries Reunies, SA, of Alost, Belgium, and Tunnel Glucose Refineries, Ltd., of London, England.

For the past several years, the three companies have been associated through the licensing of certain patented processes, Staley points out.

The broader relationship will provide channels for the production and marketing of new Staley products by the Belgian and British companies, Staley adds.

Research: The Dollar Talks

—Continued from page 4

the management of new ventures based on science and technology," because "profitable research requires comprehension and active participation by corporation management."

The active leaders of a corporation must, in addition, sell a growth program, including its cost and its problems, to the directors and owners of the company, "and keep them sold, even through periods of adversity," Dr. Prutton says.

In the research department itself, the greatest need right now is held to be creative thinkers who can generate research concepts.

"In recent years," Dr. Prutton notes, "many writers and lecturers put forth the concept that in our large, well-organized and well-managed research establishments, the day of the individual inventor or of a research achievement attributable largely to an individual has passed."

Deploring this "gigantic machine" concept of the research department, Dr. Prutton declares that "most of the better ideas must, and can only logically, come from the man at or very near the laboratory bench."

Quinine: Who's Ready

—Continued from page 3

months after the quinine in pharmaceutical form and hydrochloride powder form has been sold.

It is anticipated that delivery of the sulfate will be spread over a period of years. The purchaser will be required to take delivery of approximately 1.9 million ounces within twelve months after the sales contract has been completed. Thereafter, deliveries will be limited to not more than 1.9 million ounces during each subsequent twelve months.

This plan of disposal had been decided upon, GSA said, to protect producers, processors and consumers against avoidable disruption of their usual markets.

Bids Wanted

Herbicide, powder form, 80 percent minimum (P-chlorophenyl)-1,1-dimethylurea, remainder inert ingredients, 50 lbs. net contents per shipping container, estimated quantity, 25,000 lbs. Bid IFB 61-115, Feb. 10. US Army Chemical Procurement Dist., New York, 290 Broadway, New York 7, N. Y.

Sodium Phosphate, tribasic, anhydrous, technical, powder or granular, type I, Spec. O-S-642 w/amend. No. 2 dated Mar. 5, 1959, 100lbs. net per exterior container. Estimated quantity, 139,000 lbs. Bid IFB 61-117, Feb. 13. The proposal is for open-end type contract for a period of one year. US Army Chemical Procurement Dist., New York, 290 Broadway, New York 7, N. Y.

Tetrachloroethylene, tech., Spec. Fed. O-P-191A, 7,920 gals. Bid IFB 63077-2342-61B, Feb. 14. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Trichloroethylene, tech., Spec. FEF O-T-634A, type II, 5,840 gals. Bid IFB 63077-2340-61B, Feb. 17. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

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MIXERS—Baker Perkins 100 gal. Jack. B. P. 15 HP—Masticator Mixer. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15, 40, 80 gal. Day Jumbo 700 gal. horiz. Mixer. Sprout-Waldron 10,000# horiz. Spiral Mixer. Blystone 3000# horiz. spiral Mixer. Day 1000# horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 10,000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
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16 bgs, Van Loan & Co, Marseille
CETYL ALCOHOL—82 cs, Rohner Gehrig, Liverpool
CITRONELLA OIL—25 dms, Keelung
CLOVE—400 bgs, Djibouti
COBALT SULFATE—63 dms, Industrial Chemical Dye Co, Liverpool
COCONUT OIL—730 tons, Bank of America, Cebu
CODLIVER OIL—80 dms, Tyson Shipping Co, Reykjavik
100 dms, Scandinavian Oil Co, Reykjavik
100 dms, Whitmoyer International, Reykjavik
COMFREY ROOT—40 bls, S B Penick & Co, Hamburg
COPAL GUM—63 bgs, Wm H Scheel, Manila
62 bgs, Singapore
211 bkts, Singapore
CORIANDER SEED—876 bgs, Louis Furth, Gdynia
CREAM OF TARTAR—250 bgs, Nylos Trading Co, Genoa
CREOSOTE OIL—4,400 tons, Middlesbrough
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
DEGRAS—110 dms, Olympic Shipping Co, Liverpool
EDIFAS-A—130 bgs, Chemical Manufacturing Co, Glasgow
EYEBRIGHT HERB—16 bls, S B Penick & Co, Hamburg
GELATIN—73 dms, B Young, Avonmouth
148 cks, Corbett & Co, Marseille
100 dms, Franco Belgian Corp, London
136 cs, Coignet Chemical Co, Hamburg
GHATTI GUM—110 bgs, P A Dunkel, Bombay
GLUE—200 bgs, Jung Forwarding Co, Avonmouth
GLYOXAL—27 djns, Dr F Jonas, Marseille
GUAR GUM—1,016 bgs, Stein Hall & Co, Bombay
GYPSUM—306 bgs, L A Salomon & Bro, Liverpool
GYPSUM, CRUDE—10,053 tons, U S Gypsum Co, Hantsport
HENNA LEAVES—66 bls, Meer Corp, Bombay
IODINE, CRUDE—490 kgs, Chilean Nitrate Sales Corp, Antofagasta
170 kgs, Antony Gibbs & Co, Antofagasta
30 kgs, Chase Manhattan Bank, Yokohama
IRON BLUE—50 dms, Van Oppen & Co, Liverpool
ISO OCTANOL—712 tons, Chemical Manufacturing Co, Middlesbrough
JAPAN WAX—50 cs, Strohmeyer & Arpe, Kobe
25 cs, Frank B Ross, Kobe
KAOLIN—20 bgs, Southern Clays Inc, Hamburg
KARAYA GUM—250 bgs, Morningstar Paisley Inc, Bombay
677 bgs, Block Drug Co, Bombay
66 bgs, Meer Corp, Bombay
62 bgs, Colony Import & Export Corp, Bombay
307 bgs, Chemical Bank, Bombay
KAURI GUM—49 bgs, S Winterbourne & Co, Auckland
LAUREL LEAVES—137 bls, Izmir
LAVANDIN OIL—53 dms, Bertrand Freres, Marseille
5 dms, Coutin Associates, Marseille
LAVENDER FLOWERS—20 bls, Herbarium Inc, Marseille
LEMON OIL—10 dms, Fritzsche Bros, Vera Cruz
8 cs, Biddle Sawyer Corp, Messina
LEMONGRASS OIL—25 dms, Leonhardt & Brush, Puerto Barrios
25 dms, Lo Curto & Funk, Puerto Barrios
12 dms, International Flavors & Fragrances Inc, Cochin
LIVER POWDER—45 dms, Reheis Co, Montevideo
LIVER POWDER, DESICCATED—34 dms, Van Gelder Fanto Corp, Buenos Aires
LOCUST BEANS—40 bgs, Piraeus
LOCUST BEAN GUM—100 bgs, Meer Corp, Palma de Mallorca
800 bgs, Colony Import & Export Corp, Portimao
300 bgs, Portimao
MACE—20 cs, A G Dunn, Singapore
MANGROVE BARK—1,564 bgs, Ibo
MATTE TEA—40 cs, Meer Corp, Parnagua
45 cs, American & Foreign Agencies, Parnagua
MENTHOL—15 cs, Fleischman Burd & Co, Keelung
22 cks, Chase Manhattan Bank, Marseille
150 cs, Bemo Shipping Co, Santos
50 cs, Santos
MERCURY—150 flks, Leghorn Trading Co, Leghorn
900 flks, Leghorn
MINERAL LUBRICATING OIL—25 cs, N Y & N J Lubricant Co, Glasgow
MOLASSES—555 tons, Pacific Molasses Co, Salaverry
MONOSODIUM GLUTAMATE—10 dms, Nissho American Corp, Yokohama
MUSTARD SEED—400 bgs, Bankers Trust Co, Messina
220 bgs, C Gulden, London
NAPHTHALENE—333 bgs, J N Forker, Avonmouth
1,538 bgs, Witco Chemical Co, Avonmouth
1,119 bgs, Witco Chemical Co, Liverpool
NICOTINAMIDE—24 dms, U S Summit Corp, Genoa
NUTMEG—60 bgs, Chase Manhattan Bank, Singapore
36 bgs, P H Petry, Singapore
65 bgs, S Rinie Import & Export Co, Singapore
30 bgs, A G Dunn, Singapore
70 bgs, K H Landes & Co, Singapore
271 bgs, Incotraco Inc, Singapore
459 bgs, Singapore
OCHRE—1,200 bgs, Smith Chemical & Color Co, Avonmouth
40 bgs, C B Chrystal Co, Avonmouth
OENANTHOL-P—81 dms, International Selling Corp, Marseille
OLEORESIN PAPRIKA—13 cs, Lo Curto & Funk, Alicante
OLIVE OIL—423 dms, Swiss Credit Bank, Seville
300 dms, National City Bank, Seville
150 dms, First National Chicago, Seville
50 dms, Western Bank & Trust Co, Seville
30 dms, Uddo & Taormina, Palermo
10 dms, L Musco & Co, Palermo
20 dms, Asaro Bros, Palermo
75 dms, Chase Manhattan Bank, Seville
OPIUM—100 cs, Calcutta
OREGANO LEAVES—220 bgs, Marine Midland Trust Co, Piraeus
20 bls, Piraeus
OXGALL—4 dms, A M Goldstein, Santos
PAPAIN—126 cs, Bemo Shipping Co, Mombasa
PAPRIKA—500 bgs, M J Golombeck, Hamburg
100 bgs, Archibald & Kendall, Hamburg
200 bgs, Meer Corp, Hamburg
150 bgs, Gel Spice Co, Hamburg
100 bgs, J Raphael, Alicante
255 bgs, Gallagher & Ascher, Alicante
50 bgs, A G Beckmann, Alicante
1,537 bgs, J Weinstein, Alicante
200 bgs, Meer Corp, Alicante
25 bgs, Wm E Martin & Sons, Alicante
200 bgs, Kalamazoo Spice Extraction Co, Rijeka
400 bgs, M A Porazzi, Cartagena
PEPPER, BLACK—140 bgs, Irving Trust Co, Singapore
280 bgs, C M Van Sillevoldt, Singapore
70 bgs, Kellys America Ltd, Singapore
PEPPER, RED—100 bgs, California Commodities Corp, Kobe
200 bgs, American Commerce Co, Yokohama
212 bgs, Nigera Commodity Co, Lagos
400 bgs, Hismoco American Co, Yokohama
225 bgs, Hismoco American Co, Kobe
100 bgs, Mitsui & Co, Yokohama
160 bgs, Lagos
200 bgs, Kobe
100 bgs, Yokohama
PEPPER, WHITE—70 bgs, K H Landes & Co, Singapore
100 bgs, K H Landes & Co, Belem-Para
300 bgs, M J Golombeck, Belem-Para
PEPPERMINT LEAVES—215 cs, Meer Corp, Hamburg
PETIT GRAIN OIL—6 dms, Chase Manhattan Bank, Asuncion
20 dms, Asuncion
POPPYSEED—300 bgs, Chase Manhattan Bank, Gdynia
200 bgs, Levy & Levis Co, Gdynia
300 bgs, Sokol & Co, Gdynia
600 bgs, Louis Furth, Gdynia
300 bgs, Nieman Bros, Gdynia
500 bgs, Globe Products Co, Gdynia
PSYLLIUM SEED—52 bgs, E O Schaeffer Chemical Co, Bombay
PSYLLIUM SEED, HUSK—158 bgs, S B Penick & Co, Bombay
PYRETHRUM EXTRACT—20 dms, Prentiss Drug & Chemical Co, Mombasa
36 dms, Marine Trust Co, Mombasa
QUEBRACHO EXTRACT—521 bgs, Tac Tannins & Chemicals Inc, Buenos Aires
502 bgs, Barkey Importing Co, Buenos Aires
5,061 bgs, American Tanners Ltd, Buenos Aires
2,155 bgs, Tan American Corp, Buenos Aires
ROSEMARY LEAVES—200 bgs, M J Golombeck, Lisbon
9 bls, Van Loan & Co, Marseille
SAVORY LEAVES—60 bgs, Louis Furth, Marseille
8 bls, Van Loan & Co, Marseille
SEEDLAC—100 bgs, Capitol Shellac Corp, Calcutta
600 bgs, Mantrose Corp, Calcutta
1,400 bgs, Calcutta
SODIUM ALGINATE—20 dms, T M Duche & Sons, Glasgow
SODIUM CHLORITE—50 dms, Wedeman & Godknecht, Bremerhaven
SODIUM CYANIDE—400 dms, Chemical Manufacturing Co, Liverpool
SODIUM LAURYL SULFATE—74 cs, Yokohama
SODIUM PHOSFATE—50 cs, F Marie Ltd, Rotterdam
SODIUM SILICOFLUORIDE—200 bgs, Copenhagen
SPERM OIL—500 tons, Swift Corp, Rotterdam
1,000 tons, Archer Daniels Midland Co, Rotterdam
SULFUR, CRUDE—3,809 tons, E I Dupont De Nemours & Co, Coatzacoalcos
SUPERLITH—200 bgs, C J Osborn Co, Rotterdam
TALC—15,650 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—448 bgs, Stein Hall & Co, Kohsichang
TARA POWDER—131 bgs, Foreign Domestic Distributors, Callao
TARTARIC ACID—250 bgs, Nylos Trading Co, Genoa
THIOUREA—200 bgs, J J Gavin, Yokohama
TRICHLOROETHYLENE—580 tons, Chemical Manufacturing Co, Liverpool
TUNG OIL—106 tons, Geismar & Co, Buenos Aires
199 tons, Buenos Aires
VALONIA CUPS—1,972 bgs, Izmir
ZINC OXIDE—200 bgs, C B Chrystal Co, Marseille
1,000 bgs, Vera Cruz
ZINC SULFIDE—200 bgs, C J Osborn Co, Rotterdam

Los Angeles

ARABIC GUM—198 bgs, Port Sudan
ASBESTOS FIBER—3,700 bgs, Johns Manville Corp, Durban
CORN STARCH—200 bgs, Geismar & Co, Amsterdam
CREOSOTE OIL—1,492 tons, Ataka & Co, Yokohama
FUMARIC ACID—500 bgs, Winslow Manley, Kobe
NAPHTHA—181,143 bbls, Texaco Co, Trinidad
36,400 bbls, Mobil Oil Co, Trinidad
POTATO STARCH—240 bgs, Corn Products Co, Yokohama
ROSE HIPS—50 cs, W T Thompson Co, Gothenburg
SODIUM BICARBONATE—800 bgs, Chemical Manufacturing Co, Manchester
THIOUREA—100 bgs, Japan American Trading Co, Yokohama

Philadelphia

ASBESTOS FIBER—2,134 bgs, Keasby & Mattison, Manchester
CASEIN—600 bgs, National Casein Co, Melbourne
1,500 bgs, National Casein Co, Buenos Aires
160 bgs, F H Paul & Stein Bros, Buenos Aires
CHESTNUT EXTRACT—340 bgs, Barkey Importing Co, Naples
CLAY, CHINA—7,406 tons, Fowey
GYPSUM, CRUDE—10,910 tons, National Gypsum Co, Halifax
6,009 tons, U S Gypsum Co, Hantsport
MAGNESITE—910 tons, Split
MENTHOL—75 cs, Phila National Bank, Santos
MYROBALANS—1,454 bgs, Vizagapatam
OLIVE OIL—65 dms, Chase Manhattan Bank, Seville
100 dms, Phila National Bank, Seville
PEPPER, BLACK—480 bgs, Ludwig Mueller, Alleppey
200 bgs, Alleppey
QUEBRACHO EXTRACT—1,025 bgs, International Products Corp, Buenos Aires
400 bgs, Tanimex Corp, Buenos Aires
TAPIOCA FLOUR—2,700 bgs, Manhattan Adhesives Corp, Penang
2,644 bgs, Kohsichang
WATTLE BARK—1,069 bls, Durban

San Francisco

ANIMAL CHARCOAL—960 bgs, Glasgow
ASBESTOS FIBER—4,280 bgs, Keasby & Mattison, Lourenco Marques
5,800 bgs, Johns Manville Corp, Durban
1,200 bgs, Lourenco Marques
BRONZE POWDER—20 dms, Wedeman & Godknecht, Manchester
CARAWAY SEED—100 bgs, B C Ireland, Amsterdam
COPRA—1,000 tons, Cargill Inc, Cebu
1,030 tons, Pacific Vegetable Oil Corp, Cantanas
FISHMEAL—23,915 bgs, Wilbur Ellis Co, Callao
16,407 bgs, Albumina Supply Co, Callao
978 bgs, Marine & Animal By Products, Callao
652 bgs, F P Dow, Callao
4,346 bgs, Chimbote
GYPSUM, CRUDE—14,784 tons, Kaiser Gypsum Co, San Marcos
PEPPER, RED—100 bgs, H M Newhall & Co, Kobe
SAGE LEAVES—35 bls, Hismoco American Co, Hamburg
SESAME SEED—300 bgs, San Juan del Sur
SODIUM PERBORATE TETRAHYDRATE—100 bgs, P W Bellingall, Antwerp
SODIUM SULFAMETHAZINE—1 kg, P W Bellingall, Hamburg
TANKAGE—524 bgs, Tupman Thurlow, Buenos Aires
TRICHLOROETHYLENE—150 dms, Chemical Manufacturing Co, Liverpool
TUNG OIL—518 dms, H M Foure & Co, Beira
WATTLE EXTRACT—323 bgs, Durban

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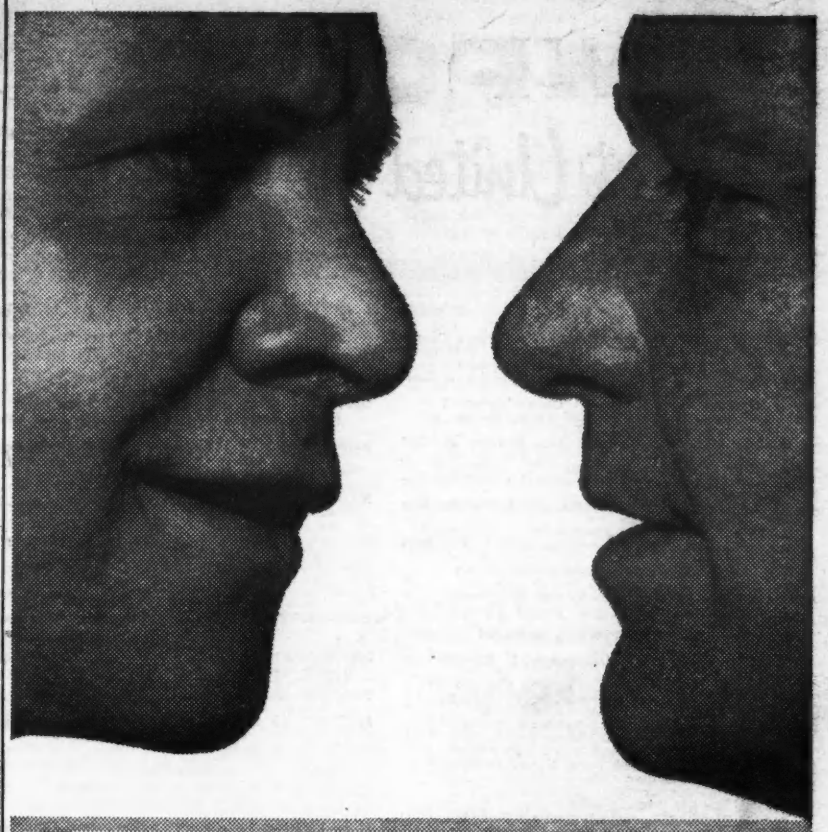

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